Index to Volume 69

July–December, 1988

Author Index

ABE H. *See* Sawamura Y, 745
ABELANET R. *See* Severson GS, 283
ABOU-MADI M. *See* Ravussin P, 869
ABRAMOVITZ JN. Book review, 638
ACKER JD. *See* Clark WC, 455
AIDA T. *See* Sawamura Y, 745
AIMONE LD. Book review, 144
ALBERT P, POLAINA M, TRUJILLO F, ROMERO J. Direct carotid sinus approach to treatment of bilateral carotid-cavernous fistulas. Case report, 942
ALBERTSON DA. *See* Lee KS, 628
ALBRIGHT AL, HAINES SJ, TAYLOR FH. Function of parietal and frontal shunts in childhood hydrocephalus, 883
ALDAMA AE. *See* Venger BH, 775
AMES A III. *See* Zager EL, 568
AMPARO EG. *See* Levin HS, 861
ANDERSEN BJ. *See* Inao S, 736
ANDERSON DK, BRAUGHLER JM, HALL ED, WATERS TR, MCCALL JM, MEANS ED. Effects of treatment with U-74006F on neurological outcome following experimental spinal cord injury, 562
ANDERSON RL. *See* Choi SC, 381
ANDERSSON KE. *See* Brandt L, 949
ANDREWS BT, CHILES BW III, OLSEN WL, PITTS LH. The effect of intracerebral hematoma location on the risk of brain-stem compression and on clinical outcome, 518
ANDREWS BT, WILSON CB. Suprasellar meningiomas: the effect of tumor location on postoperative visual outcome, 523
———. *See* Kobayashi S, 793
AOKI H. *See* Nishizaki T, 371
AOKI N. Managing proximal shunt obstruction. Letters, 805
———. Postoperative tension pneumocephalus. Letters, 641
———. Resolution of intracranial hematoma. Letters, 149
———. Symptomatic low ICP in shunted hydrocephalus. Letters, 476
APODACA G. *See* Rutka JT, 155
APUZZO MLJ. *See* Kaye AH, 1
ARCHER D. *See* Ravussin P, 869
ARONIN PA. *See* Matukas VJ, 514
ARYANPUR J, LONG DM. Schwannoma of the medulla oblongata. Case report, 446
ASAI A, MATSUTANI M, KOHNO T, FUJIMAKI T, TANAKA H, KAWAGUCHI K, KOIKE M, TAKAKURA K. Leptomeningeal and orbital benign lymphophagocytic histiocytosis. Case report, 610
AUGER RG. Book review, 958
BAE HG. *See* Lee KS, 770
BAKAY RAE, BARROW DL. Neural transplantation for Parkinson's disease. Letters, 807
BAKER RA. *See* Wrobel CJ, 934
BANG-ZONG X, HONG-XUE P, KE-MING L, XI-JIN C, YING-DEI T, YONG-LIN L, JIAN L. Study and clinical application of a porcine biomembrane for the repair of dural defects, 707
BANNO T. *See* Ohara S, 675
BARBA D. *See* Saris SC, 29
BARNWELL S. *See* Cho KG, 588
BARROW DL. Book review, 308
———. *See* Bakay RAE, 807
BASSETT JE. *See* Takayasu M, 104
BATJER HH. Angiography during treatment of cerebral lesions. Letters, 313
BEARD D. *See* Young AB, 375
BELL WO, PACKER RJ, SEIGEL KR, RORKE LB, SUTTON LN, BRUCE DA, SCHUT L. Leptomeningeal spread of intramedullary spinal cord tumors. Report of three cases, 295
BELLO JA. *See* McCormick PC, 850
BENDEBBA M. *See* Long DM, 61
BENZEL EC. *See* Willis BK, 148
BERGER MS. *See* Chatrian GE, 450
BERNARDO KL, GRUBB RL, COXE WS, ROPER CL. Anterior cervical disc herniation. Case report, 134
BERNEY J. *See* Demierre B, 644
BERNSTEIN M. *See* Kondziolka D, 494
BERRY AD III, REINTJES SL, KEPES JJ. Intracranial malignant fibrous histiocytoma with abscess-like tumor necrosis. Case report, 780
BERTRAND G. *See* Cosgrove GR, 476
BERTSCH L. *See* Mahaley MS Jr, 826
BESSER M. *See* Johnston I, 195
BETZ AL. Book review, 796
BILBAO JM. *See* Cusimano MD, 620
BLAAUW G, BRAAKMAN R, GELPKE GJ, SINGH R. Changes in radicular function following low-back surgery, 649
BLATT I, GOLDHAMMER Y. Deterioration after lumbar puncture below spinal block. Letter, 313
BLOMSTEDT GC, KYTTÄ J. Results of a randomized trial of vancomycin prophylaxis in craniotomy, 216
BOJANOWSKI WM. *See* Rigamonti D, 535
BOSE D. *See* Cardoso ER, 712
BOSNES V, HIRSCHBERG H. Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
BRAAKMAN R. *See* Blaauw G, 649
BRANDT L, SÄVELAND H, LJUNGGREN B, ANDERSSON KE. Control of epilepsy partialis continuans with intravenous nimodipine. Report of two cases, 949
———. *See* Ljunggren B, 645
BRASNU D. *See* Roux FX, 510
BRAUGHLER JM. *See* Anderson DK, 562
BREM H. *See* Tamargo RJ, 928
BRICK JF. Book review, 957
BRUCE DA. Book review, 958
———. *See* Bell WO, 295
BRUN A. *See* Salford LG, 506
BRUNER JM. *See* George RE, 403
BRUNI JE. *See* Del Bigio MR, 115
BUDINGER TF. *See* Valk PE, 830
BUDKA H. Development of glioblastoma after medulloblastoma. Letters, 642
BULLITT E. Book review, 469

Index

BULLOCK R, VAN DELLEN JR, KETELBEY W, REINACH SG. A double-blind placebo-controlled trial of perioperative prophylactic antibiotics for elective neurosurgery, 687
BURCHIEL KJ. Book review, 956
———. Percutaneous retrogasserian glycerol rhizolysis in the management of trigeminal neuralgia, 361
———, CLARKE H, HAGLUND M, LOESER JD. Long-term efficacy of microvascular decompression in trigeminal neuralgia, 35

CALLAHAN R. *See* Tu YK, 72
CAMPBELL JA. *See* Feldenzer JA, 110
CANDIA G. *See* Tu YK, 72, 82
CANNELLA DM, PREZYNA AP, KAPP JP. Primary intracranial plasma-cell granuloma. Case report, 785
CANNONI M. *See* Pellet W, 887
CARDOSO ER, REDDY K, BOSE D. Effect of subarachnoid hemorrhage on intracranial pulse waves in cats, 712
CASCINO GD. Book review, 310
CASEY JH. *See* Severson GS, 283
CHANDLER WF. *See* Greenberg HS, 500
CHANDY MJ. *See* Rajshekhar V, 150
CHAPLEAU CE. *See* Sisco AB, 962
CHATRIAN GE, BERGER MS, WIRCH AL. Discrepancy between intraoperative SSEP's and postoperative function. Case report, 450
CHEEK WR. *See* Perling LH, 613
CHENG CLY. Intracranial metastasis of prostatic adenocarcinoma. Letters, 644
CHIBA S. *See* Tanaka Y, 263
CHILES BW III. *See* Andrews BT, 518
CHIOLERO R. *See* Ravussin P, 869
CHO KG, NAGASHIMA T, BARNWELL S, HOSHINO T. Flow cytometric determination of modal DNA population in relation to proliferative potential of human intracranial neoplasms, 588
———. *See* Hoshino T, 839
CHOI SC, NARAYAN RK, ANDERSON RL, WARD JD. Enhanced specificity of prognosis in severe head injury, 381
CHYATTE D, FODE NC, SUNDT TM JR. Early versus late intracranial aneurysm surgery in subarachnoid hemorrhage, 326
CIAPPETTA P. *See* Guidetti B, 183
CLANTON JT. *See* Matukas VJ, 514
CLARK WC. TGF-β-like activity in CNS tumors. Letters, 806
———, COSCIA M, ACKER JD, WAINSCOTT K, ROBERTSON JT. Infection-related spontaneous atlantoaxial dislocation in an adult. Case report, 455
CLARKE GD. *See* Inao S, 736
CLARKE H. *See* Burchiel KJ, 35
CLIFTON GL, HADEN HT, TAYLOR JR, SOBEL M. Cerebrovascular CO_2 reactivity after carotid artery occlusion, 24
COLUMBI B. *See* Guyuron B, 210
CONSTANTINI S, COTEV S, RAPPAPORT ZH, POMERANZ S, SHALIT MN. Intracranial pressure monitoring after elective intracranial surgery. A retrospective study of 514 consecutive patients, 540
CONTANT CF. *See* Eisenberg HM, 15
COONS S. *See* Dickman CA, 940
COSCIA M. *See* Clark WC, 455
COSGROVE GR, BERTRAND G. Treatment of spinal cavernous angiomas. Letters, 476
COTEV S. *See* Constantini S, 540
COXE WS. *See* Bernardo KL, 134
CRISCUOLO GR, MERRILL MJ, OLDFIELD EH. Further characterization of malignant glioma-derived vascular permeability factor, 254
CROFFORD MJ. *See* Levin HS, 861
CUSH S. *See* Mahaley MS Jr, 826
CUSIMANO MD, KOVACS K, BILBAO JM, TUCKER WS, SINGER W. Suprasellar craniopharyngioma associated with hyperprolactinemia, pituitary lactotroph hyperplasia, and microprolactinoma. Case report, 620

DACEY RG JR. *See* Howard MA III, 121
——— *See* Takayasu M, 104
D'AVELLA D, MINGRINO S. Anatomy of lumbosacral spinal nerve roots. Letters, 314
DAVIS CH JR. *See* Lee KS, 483
DAVIS R. *See* Grabel JC, 137
DAVIS RL. *See* Hoshino T, 839
DECKERT M. *See* Roosen N, 604
DEEN DF. *See* Raffel C, 410
DEL BIGIO MR. Periventricular vessel changes in hydrocephalus: erratum. Letter, 963
———, BRUNI JE. Changes in periventricular vasculature of rabbit brain following induction of hydrocephalus and after shunting, 115
DEL BRUTTO OH, GUEVARA J, SOTELO J. Intrasellar cysticercosis, 58
DEMIERRE B, BERNEY J. Intracranial metastasis of prostatic adenocarcinoma, 644
DEMPSEY R, RAPP RP, YOUNG B, JOHNSTON S, TIBBS P. Prophylactic parenteral antibiotics in clean neurosurgical procedures: a review, 52
———. *See* Young AB, 375
DE TRIBOLET N. *See* Ravussin P, 869
DÍAZ FG. Book review, 311
DIAZ RF. *See* Greenberg HS, 500
DI CHIRO G. *See* Wrobel CJ, 934
DICKMAN CA, ZABRAMSKI JM, SONNTAG VKH, COONS S. Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report, 940
DICKSON B. Law and medicine: conflict or collaboration? The 1988 Harvey Cushing oration, 319
DISNEY LB, WEIR BKA. Nimodipine therapy in poor-grade aneurysm patients. Letters, 477
———, ———, GRACE M. Nimodipine treatment in poor-grade aneurysm patients. Letters, 803
DOMENICUCCI M. *See* Guidetti B, 183
DOPPMAN JL. *See* Wrobel CJ, 934
DOYLE WK. *See* Valk PE, 830
DRAYER BP. *See* Rigamonti D, 535
DUFF TA, FEILBACH JA, YUSUF Q, SCOTT G. Bilirubin and the induction of intracranial arterial spasm, 593
DUNCAN CC. Managing proximal shunt obstruction. Letters, 805
DUNSKER SB. Book review, 471
DYSTE GN, HITCHON PW, MENEZES AH, VANGILDER JC, GREENE GM. Stereotaxic surgery in the treatment of multiple brain abscesses, 188

EBERSOLD MJ. *See* McGirr SJ, 843
ECTORS P, MARTENS F. Postoperative tension pneumocephalus. Letters, 641
EDWARDS MSB. *See* Hoshino T, 839
———. *See* Raffel C, 410
———. *See* Wallner KE, 171
EDWIN DH. *See* Uematsu S, 552, 556
EISENBERG HM, FRANKOWSKI RF, CONTANT CF, MARSHALL LF, WALKER MD, THE COMPREHENSIVE CENTRAL NERVOUS SYS-

Index

TEM TRAUMA CENTERS. High-dose barbiturate control of elevated intracranial pressure in patients with severe head injury, 15
———. *See* Levin HS, 861
ENSMINGER WD. *See* Greenberg HS, 500
EPSTEIN JI. *See* Tamargo RJ, 928

FATOUROS PP. *See* Inao S, 736
FEDDER SL. Management of extradural hematomas. Letters, 640
FEILBACH JA. *See* Duff TA, 593
FELDENZER JA, MCKEEVER PE, SCHABERG DR, CAMPBELL JA, HOFF JT. The pathogenesis of spinal epidural abscess: microangiographic studies in an experimental model, 110
FIANDACA MS, KORDOWER JH, HANSEN JT, GASH DM. Adrenal medullary tissue grafting in Parkinson's disease. Letter, 151
FILTZER DL. *See* Long DM, 61
FINDLAY JM, WEIR BKA, STEINKE D, TANABE T, GORDON P, GRACE M. Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH, 723
FLAMM ES. Outcome after SAH: correction. Letters, 645
FLANDIN C. *See* Renier D, 877
FLETCHER WA. *See* Hodes JE, 617
FODE NC. *See* Chyatte D, 326
———. *See* Jack CR Jr, 46
FOLTZ EL. Symptomatic low ICP in shunted hydrocephalus. Letters, 476
FRANKOWSKI RF. *See* Eisenberg HM, 15
FREEMAN J. *See* Ravussin P, 869
FRIEDMAN RB. *See* Saris SC, 29
FRITZ W, SCHÄFER J, KLEIN HJ. Hearing loss after microvascular decompression for trigeminal neuralgia, 367
FUJII S, FUJITSU K. Experimental vasospasm in cultured arterial smooth-muscle cells. Part 1: Contractile and ultrastructural changes caused by oxyhemoglobin, 92
FUJIMAKI T. *See* Asai A, 610
FUJISHIMA I. *See* Tanaka T, 203
FUJITSU K. *See* Fujii S, 92
FUKUI M. *See* Oka K, 356
FURUTANI Y. *See* Nishizaki T, 371
FUWA I. *See* Yokota A, 545

GAAB MR. *See* Höllerhage HG, 919
GAETANI P. *See* Paoletti P, 488
GARRETSON HD. Utilization of resources for the maintenance of excellence in neurological surgery. The 1988 AANS presidential address, 815
GASH DM. *See* Fiandaca MS, 151
———. *See* Sladek JR Jr, 807
GAUNTT C. *See* Liu SS, 624
GEBARSKI SS. *See* Greenberg HS, 500
GEHRING DG. *See* Jack CR Jr, 46
GELBER BR. *See* Severson GS, 283
GELPKE GJ. *See* Blaauw G, 649
GEORGE B. *See* Roux FX, 510
GEORGE RE, LOUDON WG, MOSER RP, BRUNER JM, STECK PA, GRIMM EA. *In vitro* cytolysis of primitive neuroectodermal tumors of the posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
GEORGIADE NG. *See* Rawlings CE III, 269
GEYER CA. Book review, 636
GIANNOTTA SL. Book review, 308
———, MACERI DR. Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
GILLESPIE GY. *See* Mahaley MS Jr, 826
GOERSS SJ. *See* Kelly PJ, 301
GOLDBLUM S. *See* McClain CJ, 386
GOLDHAMMER Y. *See* Blatt I, 313
GOLDMAN AM. *See* Levin HS, 861
GONZALES MF. *See* Wallner KE, 171
GONZÁLEZ MF. *See* Mampalam TJ, 904
GOODMAN DF. *See* Hodes JE, 617
GORDON P. *See* Findlay JM, 723
GOWER DJ, HOLLMAN C, LEE KS, TYTELL M. *In situ* fixation of the spinal cord using microwave radiation, 719
———. *See* Lee KS, 628
GRABEL JC, DAVIS R, ZAPPULLA R. Intervertebral disc space cyst simulating a recurrent herniated nucleus pulposus. Case report, 137
GRACE M. *See* Disney L, 803
———. *See* Findlay JM, 723
GREENBERG HS, CHANDLER WF, DIAZ RF, ENSMINGER WD, JUNCK L, PAGE MA, GEBARSKI SS, MCKEEVER P, HOOD TW, STETSON PL, LITCHTER AS, TANKANOW R. Intra-arterial bromodeoxyuridine radiosensitization and radiation in treatment of malignant astrocytomas, 500
GREENE GM. *See* Dyste GN, 188
GRIGNANI G. *See* Paoletti P, 488
GRIMM EA. *See* George RE, 403
GRUBB RL. *See* Bernardo KL, 134
GUEVARA J. *See* Del Brutto OH, 58
GUGLIELMI G, GUIDETTI G, MORI S, SILIPO P. Therapeutic embolization of an ascending pharyngeal artery-internal jugular vein fistula. Case report, 132
GUIDETTI B, CIAPPETTA P, DOMENICUCCI M. Tentorial meningiomas: surgical experience with 61 cases and long-term results, 183
GUIDETTI G. *See* Guglielmi G, 132
GUILLEMIN G. *See* Roux FX, 510
GUINTO FC JR. *See* Levin HS, 861
GUTIN PH. *See* Valk PE, 830
GUYURON B, SHAFRON M, COLUMBI B. Management of extensive and difficult cranial defects, 210

HADDON WS, PROUGH DS, KONG D, PETROZZA P. Effects of nimodipine on the production of thromboxane A_2 following total global cerebral ischemia, 416
HADEN HT. *See* Clifton GL, 24
HAGLUND M. *See* Burchiel KJ, 35
HAINES SJ. *See* Albright AL, 883
HALL ED. *See* Anderson DK, 562
HALL WA. *See* Lunsford LD, 150
HANAOKA M. *See* Miyatake SI, 751
HANDEL SF. *See* Levin HS, 861
HANIGAN WC. Book review, 467
HANKER JS. *See* Rawlings CE III, 269
HANSEN JT. *See* Fiandaca MS, 151
HARDY RW JR. Book review, 467
HARPER RL. *See* Simpson RK Jr, 644
HARRELSON JM. *See* Rawlings CE III, 269
HARRINGTON DS. *See* Severson GS, 283
HAYASHI S. *See* Uematsu Y, 287
HEIFETZ MD. Carotid control for intracranial aneurysms. Technical note, 142
HEIMBURGER RF. Positional oculogyric crises. Case report, 951
HEISKANEN O. *See* Öhman J, 683
HENDLER NH. *See* Long DM, 61
HENNIG B. *See* McClain CJ, 386
HEROS D. Book review, 145

HEROS RC. Book review, 955
———. *See* Ogilvy CS, 350, 960
———. *See* Tu YK, 72, 82
HEYL BA. Book review, 145
HIÇDÖNMEZ T. *See* Zileli M, 660
HIGH WM JR. *See* Levin HS, 861
HIRSCH E. *See* Renier D, 877
HIRSCH JF. *See* Renier D, 877
HIRSCHBERG H. *See* Bosnes V, 234
HITCHON PW. *See* Dyste GN, 188
HODAK J. *See* Rigamonti D, 535
HODES JE, FLETCHER WA, GOODMAN DF, HOYT WF. Rupture of cavernous carotid artery aneurysm causing subdural hematoma and death. Case report, 617
HOFF JT. *See* Feldenzer JA, 110
HÖLLERHAGE HG. Nimodipine treatment in poor-grade aneurysm patients. Letters, 803
———. Possible role of complement peptides in SAH. Letters, 802
———, GAAB MR, ZUMKELLER M, WALTER GF. The influence of nimodipine on cerebral blood flow autoregulation and blood-brain barrier, 919
HOLLIS PH. Acute postmyelographic neurological deterioration. Letters, 148
HOLLMAN C. *See* Gower DJ, 719
HOLMGREN E. *See* Starmark JE, 692, 699
HONGO K, KASSELL NF, NAKAGOMI T, SASAKI T, TSUKAHARA T, OGAWA H, VOLLMER DG, LEHMAN RM. Subarachnoid hemorrhage inhibition of endothelium-derived relaxing factor in rabbit basilar artery, 247
———. *See* Nakagomi T, 580
HONG-XUE P. *See* Bang-Zong X, 707
HOOD TW. *See* Greenberg HS, 500
HOSHINO T, RODRÍGUEZ LA, CHO KG, LEE KS, WILSON CB, EDWARDS MSB, LEVIN VA, DAVIS RL. Prognostic implications of the proliferative potential of low-grade astrocytomas, 839
———. *See* Cho KG, 588
HOSOKAWA M. *See* Sawamura Y, 745
HOWARD MA III, DACEY RG JR, WINN HR. Brain xenografts: the effect of cyclosporin A on graft survival, 121
HOYT WF. *See* Hodes JE, 617
HYODO A. *See* Tu YK, 72, 82

IDIMAN F. *See* Zileli M, 660
INAGAWA T, YAMAMOTO M, KAMIYA K, OGASAWARA H. Management of elderly patients with aneurysmal subarachnoid hemorrhage, 332
INAO S, MARMAROU A, CLARKE GD, ANDERSEN BJ, FATOUROS PP, YOUNG HF. Production and clearance of lactate from brain tissue, cerebrospinal fluid, and serum following experimental brain injury, 736
ISHIWATA Y. Postoperative tension pneumocephalus. Letters, 641
ITAKURA T. *See* Uematsu Y, 287
ITO H. *See* Kida S, 429
IWASAKI K. *See* Miyatake SI, 751
IWASAKI Y. *See* Kato S, 760
———. *See* Suzuki M, 421

JACK CR JR, SUNDT TM JR, FODE NC, GEHRING DG. Superficial temporal-middle cerebral artery bypass: clinical pre- and postoperative angiographic correlation, 46
JANKEL WR. *See* Uematsu S, 552, 556
JANSSEN R. *See* Thadani V, 766
JENKINS NR. *See* Piepmeier JM, 399
JIAN L. *See* Bang-Zong X, 707
JOHNSON PC. *See* Liu SS, 624
———. *See* Marano SR, 599
———. *See* Pappas CTE, 789
JOHNSTON I, BESSER M, MORGAN MK. Cerebrospinal fluid diversion in the treatment of benign intracranial hypertension, 195
JOHNSTON S. *See* Dempsey R, 52
JUNCK L. *See* Greenberg HS, 500
JUNEAU P. *See* Maciunas RJ, 459

KAGEYAMA N. *See* Sakurai T, 653
KAJIWARA H. *See* Yokota A, 545
KALB R. *See* Thadani V, 766
KALISKY Z. *See* Levin HS, 861
KALL BA. *See* Kelly PJ, 301
KAMIKAWA-SEDA K. *See* Oka K, 356
KAMIYA K. *See* Inagawa T, 332
KAPP JP. *See* Cannella DM, 785
KARACOSTAS D. *See* Tu YK, 72, 82
KASHIWAGI S, TEW JM JR, VAN LOVEREN HR, THOMAS G. Trapping of giant basilar trunk aneurysms. Report of two cases, 442
KASSELL NF. *See* Hongo K, 247
———. *See* Nakagomi T, 580
KATO S, YAMAMOTO T, IWASAKI Y, NIZUMA H, NAKAMURA T, SUZUKI J. Experimental retrograde adriamycin trigeminal sensory ganglionectomy, 760
KAUFMAN H. *See* Núñez G, 436
KAWAGUCHI K. *See* Asai A, 610
KAYE AH, MORSTYN G, APUZZO MLJ. Photoradiation therapy and its potential in the management of neurological tumors, 1
KELLY PJ, GOERSS SJ, KALL BA. The stereotaxic retractor in computer-assisted stereotaxic microsurgery. Technical note, 301
KE-MING L. *See* Bang-Zong X, 707
KEPES JJ. *See* Berry AD III, 780
KETELBEY W. *See* Bullock R, 687
KIDA S, YAMASHIMA T, KUBOTA T, ITO H, YAMAMOTO S. A light and electron microscopic and immunohistochemical study of human arachnoid villi, 429
KIKUCHI H. *See* Miyatake SI, 751
KIM P, SUNDT TM JR, VANHOUTTE PM. Alterations in endothelium-dependent responsiveness of the canine basilar artery after subarachnoid hemorrhage, 239
KIM W. *See* Uematsu S, 556
KISPERT D. Book review, 472
KLEIN HJ. *See* Fritz W, 367
KNOPMAN D. Book review, 468
KOBAYASHI H. *See* Sawamura Y, 745
KOBAYASHI S, ANDREWS BT, PITTS LH, NAKAZAWA S. A new dural elevator for use during removal of the sphenoid wing. Technical note, 793
KOHCHI M. *See* Yokota A, 545
KOHNO T. *See* Asai A, 610
KOIKE M. *See* Asai A, 610
KOJIMA N. *See* Tamaki N, 393
KOJIMA T. *See* Shimizu T, 127
KOMAI N. *See* Uematsu Y, 287
KONDOH T, TAMAKI N, TAKEDA N, SUYAMA T, OI S, MATSUMOTO S. Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report, 945
KONDZIOLKA D, BERNSTEIN M, SPIEGEL SM, TER BRUGGE K. Symptomatic arterial luminal narrowing presenting months

Index

after subarachnoid hemorrhage and aneurysm clipping, 494
KONG D. *See* Haddon WS, 416
KONNO H. *See* Suzuki M, 421
KONTOS HA. *See* Muizelaar JP, 923
KORDOWER JH. *See* Fiandaca MS, 151
KORNBLITH PL. Chemotherapy of malignant gliomas: correction. Letters, 645
KOVACS K. *See* Cusimano MD, 620
KOZIKOWSKI J. *See* Uematsu S, 552, 556
KRANZLER LI. Book review, 795
KUBOTA T. *See* Kida S, 429
KUDO H. *See* Suzuki M, 421
KUSHNER M. Development of glioblastoma after medulloblastoma. Letters, 642
KUWAYAMA A. *See* Sakurai T, 653
KUZNIECKY R. Focal cortical dysplasia. Letter, 478
KYTTÄ J. *See* Blomstedt GC, 216

LAGREE K. *See* Tu YK, 72, 82
LANGFORD KH. *See* Matukas VJ, 514
LAURENT JP. *See* Perling LH, 613
LAX F. Resolution of intracranial hematoma. Letters, 149
LEE KF. *See* Yeakley JW, 867
LEE KS, BAE HG, YUN IG. Bilateral proptosis from a subgaleal hematoma. Case report, 770
———, DAVIS CH JR, MCWHORTER JM. Low morbidity and mortality of carotid endartectomy performed with regional anesthesia, 483
———, GOWER DJ, MCWHORTER JM, ALBERTSON DA. The role of MR imaging in the diagnosis and treatment of anterior sacral meningocele. Report of two cases, 628
———. *See* Gower DJ, 719
———. *See* Hoshino T, 839
LEHMAN RM. *See* Hongo K, 247
———. *See* Nakagomi T, 580
LEVASSEUR JE. *See* Muizelaar JP, 923
LEVIN HS, WILLIAMS D, CROFFORD MJ, HIGH WM JR, EISENBERG HM, AMPARO EG, GUINTO FC JR, KALISKY Z, HANDEL SF, GOLDMAN AM. Relationship of depth of brain lesions to consciousness and outcome after closed head injury, 861
LEVIN VA. *See* Hoshino T, 839
———. *See* Valk PE, 830
LEVY RM. Book review, 470
LI Z. *See* Muizelaar JP, 923
LISZCZAK T. *See* Tu YK, 82
LITCHTER AS. *See* Greenberg HS, 500
LITCHY WJ. Book review, 797
LIU SS, WHITE WL, JOHNSON PC, GAUNTT C. Hemophilic pseudotumor of the spinal canal. Case report, 624
LJUNGGREN B, BRANDT L, SAVELAND H. Outcome after SAH: correction. Letters, 645
———. *See* Brandt L, 949
LOBATO RD. Angiographically occult intracranial vascular malformations. Letters, 642, 960
———. Management of posttraumatic brain swelling. Letters, 962
LOESER JD. *See* Burchiel KJ, 35
LONG DM. Book review, 143
———, FILTZER DL, BENDEBBA M, HENDLER NH. Clinical features of the failed-back syndrome, 61
———. *See* Aryanpur J, 446
———. *See* Uematsu S, 556
LOTY B. *See* Roux FX, 510
LOUDON WG. *See* George RE, 403
LUNDBERG JM. *See* Mejia JA, 913
LUNSFORD LD, HALL WA. CT-guided stereotaxic aspiration of colloid cysts. Letters, 150
LUTHER B. Book review, 795
MACERI DR. *See* Giannotta SL, 461
MACIUNAS RJ, JUNEAU P. Limiting artifact in CT stereotaxic periventricular procedures. Technical note, 459
MAHALEY MS JR, BERTSCH L, CUSH S, GILLESPIE GY. Systemic gamma-interferon therapy for recurrent gliomas, 826
MAMPALAM TJ, GONZÁLEZ MF, WEINSTEIN P, SHARP FR. Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex, 904
MARANO SR, JOHNSON PC, SPETZLER RF. Recurrent Lhermitte-Duclos disease in a child. Case report, 599
MARMAROU A. *See* Inao S, 736
MARSHALL LF. *See* Eisenberg HM, 15
MARTENS F. *See* Ectors P, 641
MARUOKA N, YAMAKAWA Y, SHIMAUCHI M. Cavernous hemangioma of the optic nerve. Case report, 292
MATSUI N. *See* Sakurai T, 653
MATSUMOTO S. *See* Kondoh T, 945
———. *See* Tamaki N, 393
MATSUMOTO T. *See* Ohara S, 675
MATSUTANI M. *See* Asai A, 610
MATUKAS VJ, CLANTON JT, LANGFORD KH, ARONIN PA. Hydroxylapatite: an adjunct to cranial bone grafting, 514
MAYBERG MR. Book review, 636
MAYER JS. *See* Yeakley JW, 867
MAYER P. *See* Roosen N, 604
MAYFIELD FH. Treatment of epistaxis of carotid aneurysm. Letters, 644
MCCALL JM. *See* Anderson DK, 562
MCCLAIN CJ, HENNIG B, OTT LG, GOLDBLUM S, YOUNG AB. Mechanisms and implications of hypoalbuminemia in head-injured patients, 386
———. *See* Young AB, 375
MCCOMB R. *See* Severson GS, 283
MCCORMICK PC, BELLO JA, POST KD. Trigeminal schwannoma. Surgical series of 14 cases with review of the literature, 850
MCCORMICK WF. Book review, 469
MCGIRR SJ, EBERSOLD MJ, SCHEITHAUER BW, QUAST LM, SHAW EG. Choroid plexus papillomas: long-term follow-up results in a surgically treated series, 843
MCKEEVER PE. *See* Feldenzer JA, 110
———. *See* Greenberg HS, 500
MCPHEE MC. Book review, 472
MCWHORTER JM. *See* Lee KS, 483, 628
MEANS ED. *See* Anderson DK, 562
MEDINA M. Book review, 146
MEJIA JA, PERNOW J, VON HOLST H, RUDEHILL A, LUNDBERG JM. Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals, 913
MENEZES AH, VANGILDER JC. Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
———. *See* Dyste GN, 188
MERRILL MJ. *See* Criscuolo GR, 254
MICKEY B. Book review, 798
MILLER JD. Book review, 474
MINER ME. *See* Yeakley JW, 867
MINGRINO S. *See* d'Avella D, 314
MIYATAKE SI, KIKUCHI H, IWASAKI K, YAMASHITA J, ZU-YOU-LI, NAMBA Y, HANAOKA M. Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma, 751
MORGAN MK. *See* Johnston I, 195
MORI S. *See* Guglielmi G, 132
MORSTYN G. *See* Kaye AH, 1
MOSBERG WH JR. Foundation for International Education in Neurological Surgery, Inc. Report of activities, 1986–1988. Letter, 800
MOSER RP. *See* George RE, 403
MUIZELAAR JP, VAN DER POEL HG, LI Z, KONTOS HA, LEVASSEUR JE. Pial arteriolar vessel diameter and CO_2 reactivity during

prolonged hyperventilation in the rabbit, 923
MURTAGH FR. Book review, 470

NAGAI H. *See* Ohara S, 675
NAGASHIMA T. *See* Cho KG, 588
NAGAYA T. *See* Sakurai T, 653
NAKAGOMI T, HONGO K, KASSELL NF, SASAKI T, LEHMAN RM, OGAWA H, VOLLMER DG, TORNER JC. Pharmacological comparison of endothelium-dependent relaxation in isolated cerebral and extracerebral arteries, 580
———. *See* Hongo K, 247
NAKAMURA R. *See* Oka K, 356
NAKAMURA T. *See* Kato S, 760
NAKANE T. *See* Sakurai T, 653
———. *See* Shibuya M, 140
NAKAZAWA S. *See* Kobayashi S, 793
NAMBA Y. *See* Miyatake SI, 751
NARAYAN RK. *See* Choi SC, 381
NEW PF. *See* Ogilvy CS, 350
NEWELL DW. Book review, 473
NICHOLAS DS, WELLER RO. The fine anatomy of the human spinal meninges. A light and scanning electron microscopy study, 276
NICOLA N. *See* Roosen N, 604
NIRFALK S. *See* Salford LG, 506
NISHIMURA MC. *See* Obana WG, 98
NISHIZAKI T, ORITA T, SAIKI M, FURUTANI Y, AOKI H. Cell kinetics studies of human brain tumors by *in vitro* labeling using anti-BUdR monoclonal antibody, 371
NIWA S. *See* Shimizu T, 127
NIZUMA H. *See* Kato S, 760
NOUZUKA Y. *See* Oka K, 356
NÚÑEZ G, KAUFMAN H. Ergonomic considerations in the design of neurosurgery instruments, 436
NUTIK SL. Removal of the anterior clinoid process for exposure of the proximal intracranial carotid artery, 529
———. Ventral paraclinoid carotid aneurysms, 340

OBANA WG, PITTS LH, NISHIMURA MC. Effect of opiate antagonists on middle cerebral artery occlusion infarct in the rat, 98
OGASAWARA H. *See* Inagawa T, 332
OGAWA H. *See* Hongo K, 247
———. *See* Nakagomi T, 580
OGILVY CS. Book review, 637
———, HEROS RC. Angiographically occult intracranial vascular malformations. Letters, 960
———, ———, OJEMANN RG, NEW PF. Angiographically occult arteriovenous malformations, 350
OHARA S, NAGAI H, MATSUMOTO T, BANNO T. MR imaging of CSF pulsatory flow and its relation to intracranial pressure, 675
ÖHMAN J, HEISKANEN O. Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery, 683
OI S. *See* Kondoh T, 945
OJEMANN RG. *See* Ogilvy CS, 350
OKA K, TSUDA H, KAMIKASEDA K, NAKAMURA R, FUKUI M, NOUZUKA Y, SUEISHI K. Meningiomas and hemorrhagic diathesis, 356
OLDFIELD EH. *See* Criscuolo GR, 254
———. *See* Plunkett RJ, 228
———. *See* Saris SC, 29
———. *See* Wrobel CJ, 934

OLSEN WL. *See* Andrews BT, 518
ORHON C. *See* Paşaoğlu A, 772
ORITA T. *See* Nishizaki T, 371
ØSTERGAARD JR. Possible role of complement peptides in SAH. Letters, 802
OTT LG. *See* McClain CJ, 386
———. *See* Young AB, 375
Övül I. *See* Zileli M, 660

PACCHIARINI L. *See* Paoletti P, 488
PACKER RJ. *See* Bell WO, 295
PAGE MA. *See* Greenberg HS, 500
PANG D. *See* Pollack IF, 177
PAOLETTI P, GAETANI P, GRIGNANI G, PACCHIARINI L, SILVANI V, RODRIGUEZ Y BAENA R. CSF leukotriene C_4 following subarachnoid hemorrhage, 488
PAPPAS CTE, JOHNSON PC, SONNTAG VKH. Signet-ring cell lymphoma of the central nervous system. Case report, 789
PARKE WW. Anatomy of lumbosacral spinal nerve roots. Letters, 314
PARKINSON D. Angiography during treatment of cerebral lesions. Letters, 313
PARTINGTON J. *See* Thadani V, 766
PAŞAOĞLU A, PATIROĞLU TE, ORHON C, YILDIZHAN A. Cervical spinal intramedullary myxoma in childhood. Case report, 772
PATCHELL LL. *See* Yeakley JW, 867
PATIROĞLU TE. *See* Paşaoğlu A, 772
PECH A. *See* Pellet W, 887
PELLET W, CANNONI M, PECH A. The widened transcochlear approach to jugular foramen tumors, 887
PENAR PL. *See* Thadani V, 766
PENDLETON BD. Book review, 471
PERLING LH, LAURENT JP, CHEEK WR. Epidural hibernoma as a complication of corticosteroid treatment. Case report, 613
PERNOW J. *See* Mejia JA, 913
PETROZZA P. *See* Haddon WS, 416
PEVEHOUSE BC. Edwin Barkley Boldrey, M.D., 1906–1988, 813
PIEPMEIER JM, JENKINS NR. Late neurological changes following traumatic spinal cord injury, 399
PITTS LH. *See* Andrews BT, 518
———. *See* Kobayashi S, 793
———. *See* Obana WG, 98
PLENGE K. *See* Rigamonti D, 535
PLUNKETT RJ, WEBER RJ, OLDFIELD EH. Stereotaxic implantation of dispersed cell suspensions into brain. A systematic appraisal of cell placement and survival, 228
POLAINA M. *See* Albert P, 942
POLLACK IF, PANG D, SCLABASSI R. Recurrent spinal cord injury without radiographic abnormalities in children, 177
POMERANZ S. *See* Constantini S, 540
POMPILI A. Chemotherapy of malignant gliomas: correction. Letters, 645
PONS V. *See* Ross D, 669
POST KD. *See* McCormick PC, 850
POWERS M. *See* Rigamonti D, 535
PREZYNA AP. *See* Cannella DM, 785
PRICHARD JW. *See* Thadani V, 766
PROUGH DS. *See* Haddon WS, 416
PURDY P. Book review, 796

QUAST LM. *See* McGirr SJ, 843

Index

RABKIN CS. *See* Thadani V, 766
RAFFEL C, DEEN DF, EDWARDS MSB. Bromodeoxyuridine: a comparison of its photosensitizing and radiosensitizing properties, 410
RAJSHEKHAR V, CHANDY MJ. CT-guided stereotaxic aspiration of colloid cysts. Letters, 150
RAPP RP. *See* Dempsey R, 52
RAPPAPORT HH. *See* Severson GS, 283
RAPPAPORT ZH. *See* Constantini S, 540
RAVUSSIN P, ABOU-MADI M, ARCHER D, CHIOLERO R, FREEMAN J, TROP D, DE TRIBOLET N. Changes in CSF pressure after mannitol in patients with and without elevated CSF pressure, 869
RAWLINGS CE III, WILKINS RH, HANKER JS, GEORGIADE NG, HARRELSON JM. Evaluation in cats of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
REDDY K. *See* Cardoso ER, 712
REINACH SG. *See* Bullock R, 687
REINTJES SL. *See* Berry AD III, 780
REKATE H. *See* Rigamonti D, 535
RENIER D, FLANDIN C, HIRSCH E, HIRSCH JF. Brain abscesses in neonates. A study of 30 cases, 877
RICH KM. Book review, 957
RIGAMONTI D, SPETZLER RF, DRAYER BP, BOJANOWSKI WM, HODAK J, RIGAMONTI KH, PLENGE K, POWERS M, REKATE H. Appearance of venous malformations on magnetic resonance imaging, 535
RIGAMONTI KH. *See* Rigamonti D, 535
ROBERTSON JT. *See* Clark WC, 455
RODRIGUEZ LA. *See* Hoshino T, 839
RODRIGUEZ Y BAENA R. *See* Paoletti P, 488
ROGERS LA. Postendarterectomy heparin-induced thrombocytopenia. Case report, 632
ROMERO J. *See* Albert P, 942
ROOSEN N, DECKERT M, NICOLA N, WECHSLER W, SCHOBER R, VON VOSS H, MAYER P, WERNER C. Congenital anaplastic astrocytoma with favorable prognosis. Case report, 604
ROPER CL. *See* Bernardo KL, 134
RORKE LB. *See* Bell WO, 295
ROSANDER B. *See* Starmark JE, 699
ROSEGAY H. *See* Ross D, 669
ROSENBAUM A. *See* Uematsu S, 556
ROSENBERG SA. *See* Saris SC, 29
ROSENBLUM M. *See* Rutka JT, 155
ROSS D, ROSEGAY H, PONS V. Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients, 669
ROUX FX, BRASNU D, LOTY B, GEORGE B, GUILLEMIN G. Madreporic coral: a new bone graft substitute for cranial surgery, 510
RUBIN JT. *See* Saris SC, 29
RUDEHILL A. *See* Mejia JA, 913
RUTKA JT, APODACA G, STERN R, ROSENBLUM M. The extracellular matrix of the central and peripheral nervous systems: structure and function, 155

SAIKI M. *See* Nishizaki T, 371
SAKAI H. Management of extradural hematomas. Letters, 640
SAKAI T. *See* Tanaka T, 203
SAKURAI T, SEO H, YAMAMOTO N, NAGAYA T, NAKANE T, KUWAYAMA A, KAGEYAMA N, MATSUI N. Detection of mRNA of prolactin and ACTH in clinically nonfunctioning pituitary adenomas, 653
SALFORD LG, BRUN A, NIRFALK S. Ten-year survival among patients with supratentorial astrocytomas grade III and IV, 506
SAMUELS-PAKALNIS V. TGF-β-like activity in CNS tumors. Letters, 806
SANO T. *See* Tateishi A, 213
SARIS SC, ROSENBERG SA, FRIEDMAN RB, RUBIN JT, BARBA D, OLDFIELD EH. Penetration of recombinant interleukin-2 across the blood-cerebrospinal fluid barrier, 29
SASAKI T. *See* Hongo K, 247
———. *See* Nakagomi T, 580
SÄVELAND H. *See* Brandt L, 949
———. *See* Ljunggren B, 645
SAWAMURA Y, ABE H, AIDA T, HOSOKAWA M, KOBAYASHI H. Isolation and *in vitro* growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes, 745
SCHABERG DR. *See* Feldenzer JA, 110
SCHÄFER J. *See* Fritz W, 367
SCHEITHAUER BW. *See* McGirr SJ, 843
SCHMIDEK HH. Book review, 309
SCHOBER R. *See* Roosen N, 604
SCHONBERGER LB. *See* Thadani V, 766
SCHUT L. *See* Bell WO, 295
SCHWARTZKROIN PA. Book review, 312
SCLABASSI R. *See* Pollack IF, 177
SCOTT G. *See* Duff TA, 593
SEIGEL KR. *See* Bell WO, 295
SELMAN WR. Book review, 638
SEO H. *See* Sakurai T, 653
SEVERSON GS, HARRINGTON DS, WEISENBURGER DD, MCCOMB R, CASEY JH, GELBER BR, VARET B, ABELANET R, RAPPAPORT HH. Castleman's disease of the leptomeninges. Report of three cases, 283
SHAFRON M. *See* Guyuron B, 210
SHALIT MN. *See* Constantini S, 540
SHARP FR. *See* Mampalam TJ, 904
SHAW EG. *See* McGirr SJ, 843
SHELINE GE. *See* Wallner KE, 171
SHIBUYA M, SUZUKI Y, NAKANE T. A serrated suction tip for tumor removal. Technical note, 140
SHILLITO J JR. Book review, 799
SHIMAUCHI M. *See* Maruoka N, 292
SHIMIZU T, WAGA S, KOJIMA T, NIWA S. Decompression of the vertebral artery for bow-hunter's stroke. Case report, 127
SHIRATAKI K. *See* Tamaki N, 393
SHOUSE Y. *See* Tamaki N, 393
SILIPO P. *See* Guglielmi G, 132
SILVANI V. *See* Paoletti P, 488
SILVER P. *See* Valk PE, 830
SIMPSON RK JR, HARPER RL. Treatment of epistaxis of carotid aneurysm. Letters, 644
SINGER W. *See* Cusimano MD, 620
SINGH R. *See* Blaauw G, 649
SISCO AB, TIPPETT TM II, CHAPLEAU CE. Management of posttraumatic brain swelling. Letters, 962
SLADEK JR JR, GASH DM. Neural transplantation for Parkinson's disease. Letters, 807
SMITH R. Nimodipine therapy in poor-grade aneurysm patients. Letters, 477
SOBEL M. *See* Clifton GL, 24
SONNTAG VKH. *See* Dickman CA, 940
———. *See* Pappas CTE, 789
———. *See* Zabramski JM, 476
SOTELO J. *See* Del Brutto OH, 58
SPETZLER RF. Angiographically occult intracranial vascular malformations. Letters, 642
———. *See* Marano SR, 599
———. *See* Rigamonti D, 535
———. *See* Zabramski JM, 476
SPIEGEL SM. *See* Kondziolka D, 494
STÅLHAMMAR D. *See* Starmark JE, 692, 699
STARMARK JE, HOLMGREN E, STÅLHAMMAR D. Current reporting of responsiveness in acute cerebral disorders. A survey of the neurosurgical literature, 692

——— STÅLHAMMAR D, HOLMGREN E, ROSANDER B. A comparison of the Glasgow Coma Scale and the Reaction Level Scale (RLS85), 699
STECK PA. *See* George RE, 403
STEINKE D. *See* Findlay JM, 723
STERN R. *See* Rutka JT, 155
STERN WE. Dural ectasia and the Marfan syndrome, 221
STETSON PL. *See* Greenberg HS, 500
SUEISHI K. *See* Oka K, 356
SUNDT TM JR. *See* Chyatte D, 326
———. *See* Jack CR Jr, 46
———. *See* Kim P, 239
SUTTON LN. *See* Bell WO, 295
SUYAMA T. *See* Kondoh T, 945
SUZUKI J. *See* Kato S, 760
SUZUKI M, IWASAKI Y, YAMAMOTO T, KONNO H, KUDO H. Sequelae of the osmotic blood-brain barrier opening in rats, 421
SUZUKI T. *See* Tateishi A, 213
SUZUKI Y. *See* Shibuya M, 140

TAKAKURA K. *See* Asai A, 610
TAKAYASU M, BASSETT JE, DACEY RG JR. Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
TAKEDA N. *See* Kondoh T, 945
TAKESHITA H. *See* Tateishi A, 213
TAMAKI N, SHIRATAKI K, KOJIMA N, SHOUSE Y, MATSUMOTO S. Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
———. *See* Kondoh T, 945
TAMARGO RJ, EPSTEIN JI, BREM H. Heterotransplantation of malignant human gliomas in neonatal rats, 928
TANABE T. *See* Findlay JM, 723
TANAKA H. *See* Asai A, 610
TANAKA T, SAKAI T, UEMURA K, TERAMURA A, FUJISHIMA I, YAMAMOTO T. MR imaging as predictor of delayed posttraumatic cerebral hemorrhage, 203
TANAKA Y, CHIBA S. Potentiating effects of extraluminal oxyhemoglobin to intraluminal 5-hydroxytryptamine in isolated canine internal carotid arteries, 263
TANKANOW R. *See* Greenberg HS, 500
TARLOV EC. *See* Wrobel CJ, 934
TATEISHI A, SANO T, TAKESHITA H, SUZUKI T, TOKUNO H. Effects of nifedipine on intracranial pressure in neurosurgical patients with arterial hypertension, 213
TAYLOR FH. *See* Albright AL, 883
TAYLOR JR. *See* Clifton GL, 24
TERAMURA A. *See* Tanaka T, 203
TER BRUGGE K. *See* Kondziolka D, 494
TEW JM JR. *See* Kashiwagi S, 442
THADANI V, PENAR PL, PARTINGTON J, KALB R, JANSSEN R, SCHONBERGER LB, RABKIN CS, PRICHARD JW. Creutzfeldt-Jakob disease probably acquired from a cadaveric dura mater graft. Case report, 766
THOMAS G. *See* Kashiwagi S, 442
TIBBS PA. *See* Dempsey R, 52
———. *See* Young AB, 375
TIPPETT TM II. *See* Sisco AB, 962
TOKUNO H. *See* Tateishi A, 213
TORNER JC. *See* Nakagomi T, 580
TORNHEIM PA. Book review, 475
TRATTNER M. *See* Uematsu S, 552
TROP D. *See* Ravussin P, 869
TRUJILLO F. *See* Albert P, 942
TSUDA H. *See* Oka K, 356
TSUKAHARA T. *See* Hongo K, 247
TU YK, HEROS RC, CANDIA G, HYODO A, LAGREE K, CALLAHAN R, ZERVAS NT, KARACOSTAS D. Isovolemic hemodilution in experimental focal cerebral ischemia. Part 1: Effects on hemodynamics, hemorheology, and intracranial pressure, 72
———. ——— KARACOSTAS D, LISZCZAK T, HYODO A, CANDIA C, ZERVAS NT, LAGREE K. Isovolemic hemodilution in experimental focal cerebral ischemia. Part 2: Effects on regional cerebral blood flow and size of infarction, 82
TUCKER WS. *See* Cusimano MD, 620
TUNÇBAY E. *See* Zileli M, 660
TYTELL M. *See* Gower DJ, 719

U HS Book review, 959
UDVARHELYI GB. Book review, 954
UEMATSU S, EDWIN DH, JANKEL WR, KOZIKOWSKI J, TRATTNER M. Quantification of thermal asymmetry. Part 1: Normal values and reproducibility, 552
———, JANKEL WR, EDWIN DH, KIM W, KOZIKOWSKI J, ROSENBAUM A, LONG DM. Quantification of thermal asymmetry. Part 2: Application in low-back pain and sciatica, 556
UEMATSU Y, ITAKURA T, HAYASHI S, KOMAI N. Pineoblastoma with an unusually long survival. Case report, 287
UEMURA K. *See* Tanaka T, 203

VALK PE, BUDINGER TF, LEVIN VA, SILVER P, GUTIN PH, DOYLE WK. PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
VAN DELLEN JR. *See* Bullock R, 687
VAN DER POEL HG. *See* Muizelaar JP, 923
VANGILDER JC. *See* Dyste GN, 188
———. *See* Menezes AH, 895
VANHOUTTE PM. *See* Kim P, 239
VAN LOVEREN HR. *See* Kashiwagi S, 442
VARET B. *See* Severson GS, 283
VENES JL. Book review, 307
VENGER BH, ALDAMA AE. Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report, 775
VOLLMER DG. *See* Hongo K, 247
———. *See* Nakagomi T, 580
VON HOLST H. *See* Mejia JA, 913
VON VOSS H. *See* Roosen N, 604

WADA H. *See* Yokota A, 545
WAGA S. *See* Shimizu T, 127
WAINSCOTT K. *See* Clark WC, 455
WALKER MD. *See* Eisenberg HM, 15
WALLNER KE, GONZALES MF, EDWARDS MSB, WARA WM, SHELINE GE. Treatment results of juvenile pilocytic astrocytoma, 171
WALTER GF. *See* Höllerhage HG, 919

Index

WALTZ AG. Book review, 635
WARA WM. *See* Wallner KE, 171
WARD JD. *See* Choi SC, 381
WATERS TR. *See* Anderson DK, 562
WEBER RJ. *See* Plunkett RJ, 228
WECHSLER W. *See* Roosen N, 604
WEINSTEIN P. *See* Mampalam TJ, 904
WEIR BKA. *See* Disney LB, 477, 803
———. *See* Findlay JM, 723
WEISENBURGER DD. *See* Severson GS, 283
WELLER RO. *See* Nicholas DS, 276
WERNER C. *See* Roosen N, 604
WHITE WL. *See* Liu SS, 624
WILKINS RH. *See* Rawlings CE III, 269
WILLIAMS D. *See* Levin HS, 861
WILLIS BK, BENZEL EC. Acute postmyelographic neurological deterioration. Letters, 148
WILSON CB. *See* Andrews BT, 523
———. *See* Hoshino T, 839
WINN HR. *See* Howard MA III, 121
WIRCH AL. *See* Chatrian GE, 450
WOLPERT SM. MR imaging and the Chiari II malformation. Letter, 152
WROBEL CJ, OLDFIELD EH, DI CHIRO G, TARLOV EC, BAKER RA, DOPPMAN JL. Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases, 934

XI-JIN C. *See* Bang-Zong X, 707

YAMAKAWA Y. *See* Maruoka N, 292
YAMAMOTO M. *See* Inagawa T, 332
YAMAMOTO N. *See* Sakurai T, 653
YAMAMOTO S. *See* Kida S, 429
YAMAMOTO T. *See* Kato S, 760
———. *See* Suzuki M, 421
———. *See* Tanaka T, 203
YAMASHIMA T. *See* Kida S, 429
YAMASHITA J. *See* Miyatake SI, 751
YAMAURA A. Diagnosis and treatment of vertebral aneurysms, 345
YEAKLEY JW, MAYER JS, PATCHELL LL, LEE KF, MINER ME. The pseudodelta sign in acute head trauma, 867
YILDIZHAN A. *See* Paşaoğlu A, 772
YING-DEI T. *See* Bang-Zong X, 707
YOKOTA A, KAJIWARA H, KOHCHI M, FUWA I, WADA H. Parietal cephalocele: clinical importance of its atretic form and associated malformations, 545
YONG-LIN L. *See* Bang-Zong X, 707
YOUNG AB, OTT LG, BEARD D, DEMPSEY RJ, TIBBS PA, MCCLAIN CJ. The acute-phase response of the brain-injured patient, 375
———. *See* McClain CJ, 386
YOUNG B. *See* Dempsey R, 52
YOUNG HF. *See* Inao S, 736
YOUNG RF. Glycerol rhizolysis for treatment of trigeminal neuralgia, 39
YUN IG. *See* Lee KS, 770
YUSUF Q. *See* Duff TA, 593

ZABRAMSKI JM. Book review, 797
———, SPETZLER RF, SONNTAG VKH. Treatment of spinal cavernous angiomas. Letters, 476
———. *See* Dickman CA, 940
ZAGER EL, AMES A III. Reduction of cellular energy requirements. Screening for agents that may protect against CNS ischemia, 568
ZAPPULLA R. *See* Grabel JC, 137
ZERVAS NT. *See* Tu YK, 72, 82
ZILELI M, IDIMAN F, HIÇDÖNMEZ T, ÖVÜL I, TUNÇBAY E. A comparative study of brain-stem auditory evoked potentials and blink reflexes in posterior fossa tumor patients, 660
ZIVIN JA. Book review, 146
ZOVICKIAN J. Book review , 794
ZUMKELLER M. *See* Höllerhage HG, 919
ZU-YOU-LI. *See* Miyatake SI, 751

Subject Index

Acetylcholine
  Pharmacological comparison of endothelium-dependent relaxation in isolated cerebral and extracerebral arteries, 580
Acetylcholinesterase
  Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex, 904
Adenosine triphosphate
  Pharmacological comparison of endothelium-dependent relaxation in isolated cerebral and extracerebral arteries, 580
Adrenal medulla
  Adrenal medullary tissue grafting in Parkinson's disease. Letter, 151
Adrenocorticotropic hormone
  Detection of mRNA of prolactin and ACTH in clinically nonfunctioning pituitary adenomas, 653
Adriamycin
  Experimental retrograde adriamycin trigeminal sensory ganglionectomy, 760
Albumin
  Sequelae of the osmotic blood-brain barrier opening in rats, 421
American Association of Neurological Surgeons
  Law and medicine: conflict or collaboration? The 1988 Harvey Cushing oration, 319
  Utilization of resources for the maintenance of excellence in neurological surgery. The 1988 AANS presidential address, 815
Anatomical study
  Anatomy of lumbosacral spinal nerve roots. Letters, 314
  The fine anatomy of the human spinal meninges. A light and scanning electron microscopy study, 276
Anesthesia
  Low morbidity and mortality of carotid endartectomy performed with regional anesthesia, 483
Aneurysm
  Angiography during treatment of cerebral lesions. Letters, 313
  Carotid control for intracranial aneurysms. Technical note, 142
  Diagnosis and treatment of vertebral aneurysms, 345
  Early versus late intracranial aneurysm surgery in subarachnoid hemorrhage, 326
  Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery, 683
  Management of elderly patients with aneurysmal subarachnoid hemorrhage, 332
  Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report, 775
  Nimodipine therapy in poor-grade aneurysm patients. Letters, 477
  Nimodipine treatment in poor-grade aneurysm patients. Letters, 803
  Removal of the anterior clinoid process for exposure of the proximal intracranial carotid artery, 529
  Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
  Rupture of cavernous carotid artery aneurysm causing subdural hematoma and death. Case report, 617
  Symptomatic arterial luminal narrowing presenting months after subarachnoid hemorrhage and aneurysm clipping, 494
  Trapping of giant basilar trunk aneurysms. Report of two cases, 442
  Treatment of epistaxis of carotid aneurysm. Letters, 644
  Ventral paraclinoid carotid aneurysms, 340
Aneurysm trapping
  Trapping of giant basilar trunk aneurysms. Report of two cases, 442
Angiofollicular lymphoid hyperplasia
  Castleman's disease of the leptomeninges. Report of three cases, 283
Angiography
  Angiographically occult arteriovenous malformations, 350
  Angiography during treatment of cerebral lesions. Letters, 313
  The pathogenesis of spinal epidural abscess: microangiographic studies in an experimental model, 110
Anterior clinoid process
  Removal of the anterior clinoid process for exposure of the proximal intracranial carotid artery, 529
Anterior sacral meningocele
  The role of MR imaging in the diagnosis and treatment of anterior sacral meningocele. Report of two cases, 628
Antibiotic prophylaxis
  A double-blind placebo-controlled trial of perioperative prophylactic antibiotics for elective neurosurgery, 687
  Prophylactic parenteral antibiotics in clean neurosurgical procedures: a review, 52
  Results of a randomized trial of vancomycin prophylaxis in craniotomy, 216
Antioxidant agent
  Effects of treatment with U-74006F on neurological outcome following experimental spinal cord injury, 562
Aortic media
  Experimental vasospasm in cultured arterial smooth-muscle cells. Part 1: Contractile and ultrastructural changes caused by oxyhemoglobin, 92
Arachnodactyly
  Dural ectasia and the Marfan syndrome, 221
Arachnoid villi
  A light and electron microscopic and immunohistochemical study of human arachnoid villi, 429
Arteriovenous fistula
  Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report, 945
  Therapeutic embolization of an ascending pharyngeal artery-internal jugular vein fistula. Case report, 132
Arteriovenous malformation
  Angiographically occult arteriovenous malformations, 350
  Angiographically occult intracranial vascular malformations. Letters, 642, 960
  Angiography during treatment of cerebral lesions. Letters, 313
  Direct carotid sinus approach to treatment of bilateral carotid-cavernous fistulas. Case report, 942
  Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases, 934

Index

Artery, *see* specific arteries
Ascending pharyngeal artery
  Therapeutic embolization of an ascending pharyngeal artery-internal jugular vein fistula. Case report, 132
Astrocytoma
  Congenital anaplastic astrocytoma with favorable prognosis. Case report, 604
  Intra-arterial bromodeoxyuridine radiosensitization and radiation in treatment of malignant astrocytomas, 500
  PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
  Prognostic implications of the proliferative potential of low-grade astrocytomas, 839
  Ten-year survival among patients with supratentorial astrocytomas grade III and IV, 506
Atlantoaxial dislocation
  Infection-related spontaneous atlantoaxial dislocation in an adult. Case report, 455
Atlas
  Decompression of the vertebral artery for bow-hunter's stroke. Case report, 127
Autogenous bone graft
  Management of extensive and difficult cranial defects, 210
Autoregulation
  Cerebrovascular CO_2 reactivity after carotid artery occlusion, 24
Axis
  Decompression of the vertebral artery for bow-hunter's stroke. Case report, 127
Axoplasmic transport
  Experimental retrograde adriamycin trigeminal sensory ganglionectomy, 760

Barbiturate
  High-dose barbiturate control of elevated intracranial pressure in patients with severe head injury, 15
Basement membrane
  The extracellular matrix of the central and peripheral nervous systems: structure and function, 155
Basilar artery
  Alterations in endothelium-dependent responsiveness of the canine basilar artery after subarachnoid hemorrhage, 239
  Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
  Subarachnoid hemorrhage inhibition of endothelium-derived relaxing factor in rabbit basilar artery, 247
  Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
  Trapping of giant basilar trunk aneurysms. Report of two cases, 442
Benign intracranial hypertension
  Cerebrospinal fluid diversion in the treatment of benign intracranial hypertension, 195
Bilirubin
  Bilirubin and the induction of intracranial arterial spasm, 593
Biomembrane
  Study and clinical application of a porcine biomembrane for the repair of dural defects, 707
Blood-brain barrier
  The influence of nimodipine on cerebral blood flow autoregulation and blood-brain barrier, 919
  Penetration of recombinant interleukin-2 across the blood-cerebrospinal fluid barrier, 29
  Sequelae of the osmotic blood-brain barrier opening in rats, 421
Boldrey, Edwin Barkley
  Edwin Barkley Boldrey, M.D., 1906–1988, 813
Bone-flap infection
  Results of a randomized trial of vancomycin prophylaxis in craniotomy, 216
Bone graft
  Hydroxylapatite: an adjunct to cranial bone grafting, 514
  Madreporic coral: a new bone graft substitute for cranial surgery, 510
Book reviews
  Adelman G (ed). *Encyclopedia of neuroscience, volumes I and II*, 312
  Adler CS, Adler SM, Packard RC. *Psychiatric aspects of headache*, 145
  Akil H, Lewis JW (eds). *Neurotransmitters and pain control. Pain and headache, vol 9*, 144
  American College of Legal Medicine (ed). *Legal medicine. Legal dynamics of medical encounters*, 795
  Bakay L. *Neurosurgeons of the past*, 467
  Brazier MAB. *A history of neurophysiology in the 19th century*, 467
  Cauthen JC (ed). *Lumbar spine surgery. Indications, techniques, failures, and alternatives, ed 2*, 638
  Cervós-Navarro J, Ferszt R (eds). *Stroke and microcirculation*, 635
  Daniels DL, Haughton VM, Naidich TP. *Cranial and spinal magnetic resonance imaging. An atlas and guide*, 472
  Daroff RB, Conomy JP (eds). *Contributions to contemporary neurology. A tribute to Joseph Michael Foley*, 957
  de Slegte RGM, Valk J, Lohman AHM, Zonneveld FW. *Cisternographic anatomy of the posterior cranial fossa. High resolution CT and MRI study*, 470
  Dolenc VV (ed). *The cavernous sinus. A multidisciplinary approach to vascular and tumorous lesions*, 471
  Easter SS Jr, Barald KF, Carlson BM (eds). *From message to mind*, 959
  Fields HL. *Pain*, 143
  Frye-Pierson J, Toole JF. *Stroke. A guide for patient and family*, 146
  George B, Laurian C. *The vertebral artery. Pathology and surgery*, 311
  Gybels J, Hitchcock ER, Meyerson B, Ostertag C, Rossi GF (eds). *Advances in stereotactic and functional neurosurgery 7. Acta Neurochirurgica Supplementum 39*, 637
  Hoffman HJ, Epstein F (eds). *Disorders of the developing nervous system: diagnosis and treatment*, 799
  Jancovic J, Tolosa E (eds). *Facial dyskinesias. Advances in neurology, vol 49*, 958
  Kandel ER (ed). *Molecular neurobiology in neurology and psychiatry. Research publications: Association for Research in Nervous and Mental Disease, vol 65*, 146
  Kornblith PL, Walker MD, Cassady JR. *Neurologic oncology*, 145
  Lasjaunias P, Berenstein A (eds). *Surgical neuroangiography. 2. Endovascular treatment of craniofacial lesions*, 636
  Leetsma JE, Kirkpatrick JB. *Forensic neuropathology*, 469
  Levin HS, Grafman J, Eisenberg HM (eds). *Neurobehavioral recovery from head injury*, 473
  Mchedlishvili G, Cervós-Navarro J, Hossmann KA, Klatzo I (eds). *Brain edema. A pathogenetic analysis*, 475
  Milhorat TH. *Cerebrospinal fluid and the brain edemas*, 796
  Miller JD (ed). *Northfield's surgery of the central nervous system, ed 2*, 798
  Miner ME, Wagner KA (eds). *Neurotrauma. Treatment, rehabilitation, and related issues, no. 2*, 472
  Mountcastle VB (ed). *Handbook of physiology, section 1: The*

nervous system. Vol V: Higher functions of the brain, parts 1 and 2, 797
Ojemann RG, Heros RC, Crowell RM. *Surgical management of cerebrovascular disease, ed 2*, 636
Pluchino F, Broggi G (eds). *Advanced technology in neurosurgery*, 956
Powers WJ, Raichle ME (eds). *Cerebrovascular diseases. Fifteenth Research (Princeton) Conference*, 308
Raimondi AJ. *Pediatric neurosurgery. Theoretical principles. Art of surgical techniques*, 307
Ropper AH, Kennedy SF (eds). *Neurological and neurosurgical intensive care, ed 2*, 474
Rose FC (ed). *The management of headache*, 469
Rosenblum ML, Levy RM, Bredesen DE (eds). *AIDS and the nervous system*, 794
Sano K, Asano T, Tamura A. *Acute aneurysm surgery. Pathophysiology and management*, 638
Stevens JM, Valentine AR, Kendall BE. *Computed cranial and spinal imaging. A practical introduction*, 796
Symon L (ed). *Advances and technical standards in neurosurgery, vol 14*, 471
Symon L (ed). *Advances and technical standards in neurosurgery, vol 15*, 957
Terry RD (ed). *Aging and the brain. Aging, vol 32*, 468
Vernadakis A, Privat A, Lauder JM, Timiras PS, Giacobini E (eds). *Model systems of development and aging of the nervous system*, 309
Walton J. *Introduction to clinical neuroscience, ed 2*, 797
Weistrop L. *The life and letters of Dr. Henry Vining Ogden, 1857–1931*, 954
Wieser HG, Elger CE (eds). *Presurgical evaluation of epileptics. Basics, techniques, implications*, 310
Wood JH (ed). *Cerebral blood flow. Physiologic and clinical aspects*, 308
Yaşargil MG. *Microneurosurgery, volume IIIB. AVM of the brain, clinical considerations, general and specific operative techniques, surgical results, nonoperated cases, cavernous and venous angiomas, neuroanesthesia*, 955
Young SW. *Magnetic resonance imaging: basic principles, ed 2*, 470
Zeltzer PM, Pochedly C (eds). *Medulloblastomas in children. New concepts in tumor biology, diagnosis and treatment*, 958

Bow-hunter's stroke
Decompression of the vertebral artery for bow-hunter's stroke. Case report, 127

Brain abscess
Brain abscesses in neonates. A study of 30 cases, 877
Stereotaxic surgery in the treatment of multiple brain abscesses, 188

Brain neoplasm, *see also* specific tumors
Bromodeoxyuridine: a comparison of its photosensitizing and radiosensitizing properties, 410
Cell kinetics studies of human brain tumors by *in vitro* labeling using anti-BUdR monoclonal antibody, 371
Chemotherapy of malignant gliomas: correction. Letters, 645
Choroid plexus papillomas: long-term follow-up results in a surgically treated series, 843
A comparative study of brain-stem auditory evoked potentials and blink reflexes in posterior fossa tumor patients, 660
Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
Congenital anaplastic astrocytoma with favorable prognosis. Case report, 604
Development of glioblastoma after medulloblastoma. Letters, 642
The extracellular matrix of the central and peripheral nervous systems: structure and function, 155
Flow cytometric determination of modal DNA population in relation to proliferative potential of human intracranial neoplasms, 588
Further characterization of malignant glioma-derived vascular permeability factor, 254
Heterotransplantation of malignant human gliomas in neonatal rats, 928
Intra-arterial bromodeoxyuridine radiosensitization and radiation in treatment of malignant astrocytomas, 500
Intracranial malignant fibrous histiocytoma with abscess-like tumor necrosis. Case report, 780
Intracranial pressure monitoring after elective intracranial surgery. A retrospective study of 514 consecutive patients, 540
In vitro cytolysis of primitive neuroectodermal tumors of the posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
Isolation and *in vitro* growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes, 745
Meningiomas and hemorrhagic diathesis, 356
Penetration of recombinant interleukin-2 across the blood-cerebrospinal fluid barrier, 29
PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
Photoradiation therapy and its potential in the management of neurological tumors, 1
Pineoblastoma with an unusually long survival. Case report, 287
Positional oculogyric crises. Case report, 951
Primary intracranial plasma-cell granuloma. Case report, 785
Prognostic implications of the proliferative potential of low-grade astrocytomas, 839
Recurrent Lhermitte-Duclos disease in a child. Case report, 599
Schwannoma of the medulla oblongata. Case report, 446
A serrated suction tip for tumor removal. Technical note, 140
Signet-ring cell lymphoma of the central nervous system. Case report, 789
Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma, 751
Stereotaxic implantation of dispersed cell suspensions into brain. A systematic appraisal of cell placement and survival, 228
The stereotaxic retractor in computer-assisted stereotaxic microsurgery. Technical note, 301
Suprasellar craniopharyngioma associated with hyperprolactinemia, pituitary lactotroph hyperplasia, and microprolactinoma. Case report, 620
Suprasellar meningiomas: the effect of tumor location on postoperative visual outcome, 523
Systemic gamma-interferon therapy for recurrent gliomas, 826
Tentorial meningiomas: surgical experience with 61 cases and long-term results, 183
Ten-year survival among patients with supratentorial astrocytomas grade III and IV, 506
TGF-β-like activity in CNS tumors. Letters, 806
Treatment results of juvenile pilocytic astrocytoma, 171
Trigeminal schwannoma. Surgical series of 14 cases with review of the literature, 850
The widened transcochlear approach to jugular foramen tumors, 887

Brain-stem auditory evoked potentials
A comparative study of brain-stem auditory evoked potentials and blink reflexes in posterior fossa tumor patients, 660

Bromodeoxyuridine
Bromodeoxyuridine: a comparison of its photosensitizing and radiosensitizing properties, 410
Cell kinetics studies of human brain tumors by *in vitro* labeling using anti-BUdR monoclonal antibody, 371
Flow cytometric determination of modal DNA population in relation to proliferative potential of human intracranial neoplasms, 588
Intra-arterial bromodeoxyuridine radiosensitization and radiation in treatment of malignant astrocytomas, 500
Prognostic implications of the proliferative potential of low-grade astrocytomas, 839

Index

Cadaveric dura
  Creutzfeldt-Jakob disease probably acquired from a cadaveric dura mater graft. Case report, 766
Calcitonin gene-related peptide
  Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals, 913
Calcium antagonist
  Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
Capsaicin
  Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals, 913
Carotid artery occlusion
  Cerebrovascular CO_2 reactivity after carotid artery occlusion, 24
Carotid-cavernous fistula
  Direct carotid sinus approach to treatment of bilateral carotid-cavernous fistulas. Case report, 942
Carotid endarterectomy
  Low morbidity and mortality of carotid endartectomy performed with regional anesthesia, 483
  Postendarterectomy heparin-induced thrombocytopenia. Case report, 632
Castleman's disease
  Castleman's disease of the leptomeninges. Report of three cases, 283
Cavernous hemangioma
  Cavernous hemangioma of the optic nerve. Case report, 292
Cavernous sinus
  Removal of the anterior clinoid process for exposure of the proximal intracranial carotid artery, 529
Cefazolin
  Prophylactic parenteral antibiotics in clean neurosurgical procedures: a review, 52
Cell kinetics
  Cell kinetics studies of human brain tumors by *in vitro* labeling using anti-BUdR monoclonal antibody, 371
Central nervous system
  The extracellular matrix of the central and peripheral nervous systems: structure and function, 155
  Reduction of cellular energy requirements. Screening for agents that may protect against CNS ischemia, 568
Cerebral artery
  Pharmacological comparison of endothelium-dependent relaxation in isolated cerebral and extracerebral arteries, 580
Cerebral blood flow
  Cerebrovascular CO_2 reactivity after carotid artery occlusion, 24
  The influence of nimodipine on cerebral blood flow autoregulation and blood-brain barrier, 919
  Isovolemic hemodilution in experimental focal cerebral ischemia. Part 1: Effects on hemodynamics, hemorheology, and intracranial pressure, 72
  Isovolemic hemodilution in experimental focal cerebral ischemia. Part 2: Effects on regional cerebral blood flow and size of infarction, 82
Cerebral edema
  Further characterization of malignant glioma-derived vascular permeability factor, 254
  Management of posttraumatic brain swelling. Letters, 962
Cerebral infarction
  Isovolemic hemodilution in experimental focal cerebral ischemia. Part 2: Effects on regional cerebral blood flow and size of infarction, 82
Cerebral ischemia
  CSF leukotriene C_4 following subarachnoid hemorrhage, 488
  Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery, 683
  Effect of opiate antagonists on middle cerebral artery occlusion infarct in the rat, 98
  Effects of nimodipine on the production of thromboxane A_2 following total global cerebral ischemia, 416
  Isovolemic hemodilution in experimental focal cerebral ischemia. Part 1: Effects on hemodynamics, hemorheology, and intracranial pressure, 72
  Isovolemic hemodilution in experimental focal cerebral ischemia. Part 2: Effects on regional cerebral blood flow and size of infarction, 82
  Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex, 904
  Reduction of cellular energy requirements. Screening for agents that may protect against CNS ischemia, 568
  Superficial temporal-middle cerebral artery bypass: clinical pre- and postoperative angiographic correlation, 46
  Symptomatic arterial luminal narrowing presenting months after subarachnoid hemorrhage and aneurysm clipping, 494
Cerebral perfusion pressure
  Changes in CSF pressure after mannitol in patients with and without elevated CSF pressure, 869
  Effects of nifedipine on intracranial pressure in neurosurgical patients with arterial hypertension, 213
Cerebrospinal fluid
  Changes in CSF pressure after mannitol in patients with and without elevated CSF pressure, 869
  A light and electron microscopic and immunohistochemical study of human arachnoid villi, 429
  MR imaging of CSF pulsatory flow and its relation to intracranial pressure, 675
  Penetration of recombinant interleukin-2 across the blood-cerebrospinal fluid barrier, 29
Cerebrovascular disease
  Superficial temporal-middle cerebral artery bypass: clinical pre- and postoperative angiographic correlation, 46
Cerebrovascular reactivity
  Pial arteriolar vessel diameter and CO_2 reactivity during prolonged hyperventilation in the rabbit, 923
Cervical spine
  Anterior cervical disc herniation. Case report, 134
Chemotherapy
  Chemotherapy of malignant gliomas: correction. Letters, 645
Chiari II malformation
  MR imaging and the Chiari II malformation. Letter, 152
Children
  Cervical spinal intramedullary myxoma in childhood. Case report, 772
  Epidural hibernoma as a complication of corticosteroid treatment. Case report, 613
  Function of parietal and frontal shunts in childhood hydrocephalus, 883
  Recurrent spinal cord injury without radiographic abnormalities in children, 177
  Treatment results of juvenile pilocytic astrocytoma, 171
Chordoma
  Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
Choroid plexus
  Choroid plexus papillomas: long-term follow-up results in a surgically treated series, 843
Clivus chordoma
  Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
Coagulopathy
  Meningiomas and hemorrhagic diathesis, 356
Colloid cyst
  CT-guided stereotaxic aspiration of colloid cysts. Letters, 150
Coma grading
  A comparison of the Glasgow Coma Scale and the Reaction Level Scale (RLS85), 699
  Current reporting of responsiveness in acute cerebral disorders. A survey of the neurosurgical literature, 692

Complement peptides
Possible role of complement peptides in SAH. Letters, 802
Computerized tomography
CT-guided stereotaxic aspiration of colloid cysts. Letters, 150
Limiting artifact in CT stereotaxic periventricular procedures. Technical note, 459
MR imaging as predictor of delayed posttraumatic cerebral hemorrhage, 203
The pseudodelta sign in acute head trauma, 867
The stereotaxic retractor in computer-assisted stereotaxic microsurgery. Technical note, 301
Stereotaxic surgery in the treatment of multiple brain abscesses, 188
Congenital lesion
Congenital anaplastic astrocytoma with favorable prognosis. Case report, 604
Parietal cephalocele: clinical importance of its atretic form and associated malformations, 545
Conus medullaris
Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
CO_2 reactivity
Cerebrovascular CO_2 reactivity after carotid artery occlusion, 24
Cortical dysplasia
Focal cortical dysplasia. Letter, 478
Corticosteroid
Epidural hibernoma as a complication of corticosteroid treatment. Case report, 613
Cranial defect
Evaluation in cats of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
Hydroxylapatite: an adjunct to cranial bone grafting, 514
Madreporic coral: a new bone graft substitute for cranial surgery, 510
Management of extensive and difficult cranial defects, 210
Craniopharyngioma
Suprasellar craniopharyngioma associated with hyperprolactinemia, pituitary lactotroph hyperplasia, and microprolactinoma. Case report, 620
Cranioplasty
Evaluation in cats of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
Hydroxylapatite: an adjunct to cranial bone grafting, 514
Madreporic coral: a new bone graft substitute for cranial surgery, 510
Management of extensive and difficult cranial defects, 210
Craniotomy
Results of a randomized trial of vancomycin prophylaxis in craniotomy, 216
Craniovertebral junction
Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
Creutzfeldt-Jakob disease
Creutzfeldt-Jakob disease probably acquired from a cadaveric dura mater graft. Case report, 766
Cushing oration
Law and medicine: conflict or collaboration? The 1988 Harvey Cushing oration, 319
Cushing's syndrome
Epidural hibernoma as a complication of corticosteroid treatment. Case report, 613
Cyclosporin A
Brain xenografts: the effect of cyclosporin A on graft survival, 121
Cyst
CT-guided stereotaxic aspiration of colloid cysts. Letters, 150
Intervertebral disc space cyst simulating a recurrent herniated nucleus pulposus. Case report, 137
Cysticercosis
Intrasellar cysticercosis, 58
Cytometry
Flow cytometric determination of modal DNA population in relation to proliferative potential of human intracranial neoplasms, 588
Cytotoxicity
Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma, 751
Dentate ligament
The fine anatomy of the human spinal meninges. A light and scanning electron microscopy study, 276
Dexamethasone
Further characterization of malignant glioma-derived vascular permeability factor, 254
Diltiazem
Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
Discectomy
Intervertebral disc space cyst simulating a recurrent herniated nucleus pulposus. Case report, 137
Dissecting aneurysm
Diagnosis and treatment of vertebral aneurysms, 345
DNA
Flow cytometric determination of modal DNA population in relation to proliferative potential of human intracranial neoplasms, 588
Drug toxicity
Systemic gamma-interferon therapy for recurrent gliomas, 826
Dural arteriovenous fistula
Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases, 934
Dural ectasia
Dural ectasia and the Marfan syndrome, 221
Dural elevator
A new dural elevator for use during removal of the sphenoid wing. Technical note, 793
Dural substitute
Creutzfeldt-Jakob disease probably acquired from a cadaveric dura mater graft. Case report, 766
Study and clinical application of a porcine biomembrane for the repair of dural defects, 707
Dysphagia
Anterior cervical disc herniation. Case report, 134
Embolization
Direct carotid sinus approach to treatment of bilateral carotid-cavernous fistulas. Case report, 942
Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report, 945
Therapeutic embolization of an ascending pharyngeal artery-internal jugular vein fistula. Case report, 132

Index

Encephalocele
Parietal cephalocele: clinical importance of its atretic form and associated malformations, 545
Endocarditis
Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report, 775
Endothelial cell
A light and electron microscopic and immunohistochemical study of human arachnoid villi, 429
Mechanisms and implications of hypoalbuminemia in head-injured patients, 386
Endothelium
Pharmacological comparison of endothelium-dependent relaxation in isolated cerebral and extracerebral arteries, 580
Endothelium-derived relaxing factor
Alterations in endothelium-dependent responsiveness of the canine basilar artery after subarachnoid hemorrhage, 239
Subarachnoid hemorrhage inhibition of endothelium-derived relaxing factor in rabbit basilar artery, 247
Ependymoma
Discrepancy between intraoperative SSEP's and postoperative function. Case report, 450
Epidural anomaly
Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report, 940
Epidural lipomatosis
Epidural hibernoma as a complication of corticosteroid treatment. Case report, 613
Epilepsy partialis continuans
Control of epilepsy partialis continuans with intravenous nimodipine. Report of two cases, 949
Epistaxis
Treatment of epistaxis of carotid aneurysm. Letters, 644
Errata
Chemotherapy of malignant gliomas: correction. Letters, 645
Outcome after SAH: correction. Letters, 645
Periventricular vessel changes in hydrocephalus: erratum. Letter, 963
Evoked potentials
A comparative study of brain-stem auditory evoked potentials and blink reflexes in posterior fossa tumor patients, 660
Discrepancy between intraoperative SSEP's and postoperative function. Case report, 450
Extracellular matrix
The extracellular matrix of the central and peripheral nervous systems: structure and function, 155
Extradural hematoma
Management of extradural hematomas. Letters, 640

Facial pain
Glycerol rhizolysis for treatment of trigeminal neuralgia, 39
Hearing loss after microvascular decompression for trigeminal neuralgia, 367
Long-term efficacy of microvascular decompression in trigeminal neuralgia, 35
Percutaneous retrogasserian glycerol rhizolysis in the management of trigeminal neuralgia, 361
Failed-back syndrome
Clinical features of the failed-back syndrome, 61
Fetal cortex
Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex, 904
Financial costs
Utilization of resources for the maintenance of excellence in neurological surgery. The 1988 AANS presidential address, 815
Focal seizure
Control of epilepsy partialis continuans with intravenous nimodipine. Report of two cases, 949
Foundation for International Education in Neurological Surgery, Inc.
Foundation for International Education in Neurological Surgery, Inc. Report of activities, 1986–1988. Letter, 800
Frontal sinus
Evaluation in cats of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
Fusiform aneurysm
Diagnosis and treatment of vertebral aneurysms, 345

Gangliocytoma
Recurrent Lhermitte-Duclos disease in a child. Case report, 599
Ganglionectomy
Experimental retrograde adriamycin trigeminal sensory ganglionectomy, 760
Geriatrics
Management of elderly patients with aneurysmal subarachnoid hemorrhage, 332
Glasgow Coma Scale
A comparison of the Glasgow Coma Scale and the Reaction Level Scale (RLS85), 699
Current reporting of responsiveness in acute cerebral disorders. A survey of the neurosurgical literature, 692
Enhanced specificity of prognosis in severe head injury, 381
Relationship of depth of brain lesions to consciousness and outcome after closed head injury, 861
Glioblastoma
Development of glioblastoma after medulloblastoma. Letters, 642
PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
Positional oculogyric crises. Case report, 951
Glioblastoma multiforme
Ten-year survival among patients with supratentorial astrocytomas grade III and IV, 506
Glioma
Chemotherapy of malignant gliomas: correction. Letters, 645
Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
Heterotransplantation of malignant human gliomas in neonatal rats, 928
Isolation and *in vitro* growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes, 745
Photoradiation therapy and its potential in the management of neurological tumors, 1
Systemic gamma-interferon therapy for recurrent gliomas, 826
Treatment results of juvenile pilocytic astrocytoma, 171
Gliosarcoma
Bromodeoxyuridine: a comparison of its photosensitizing and radiosensitizing properties, 410
Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma, 751
Glomus jugulare
The widened transcochlear approach to jugular foramen tumors, 887
Glycerol rhizolysis
Glycerol rhizolysis for treatment of trigeminal neuralgia, 39
Percutaneous retrogasserian glycerol rhizolysis in the management of trigeminal neuralgia, 361

Head injury
The acute-phase response of the brain-injured patient, 375
Bilateral proptosis from a subgaleal hematoma. Case report, 770
The effect of intracerebral hematoma location on the risk of brain-stem compression and on clinical outcome, 518
Enhanced specificity of prognosis in severe head injury, 381
High-dose barbiturate control of elevated intracranial pressure in patients with severe head injury, 15
Management of posttraumatic brain swelling. Letters, 962
Mechanisms and implications of hypoalbuminemia in head-injured patients, 386
MR imaging as predictor of delayed posttraumatic cerebral hemorrhage, 203
Production and clearance of lactate from brain tissue, cerebrospinal fluid, and serum following experimental brain injury, 736
The pseudodelta sign in acute head trauma, 867
Relationship of depth of brain lesions to consciousness and outcome after closed head injury, 861
Hearing loss
Hearing loss after microvascular decompression for trigeminal neuralgia, 367
Hematoporphyrin derivative
Photoradiation therapy and its potential in the management of neurological tumors, 1
Hemodilution
Isovolemic hemodilution in experimental focal cerebral ischemia. Part 1: Effects on hemodynamics, hemorheology, and intracranial pressure, 72
Isovolemic hemodilution in experimental focal cerebral ischemia. Part 2: Effects on regional cerebral blood flow and size of infarction, 82
Hemophilic pseudotumor
Hemophilic pseudotumor of the spinal canal. Case report, 624
Hemorrhagic diathesis
Meningiomas and hemorrhagic diathesis, 356
Heparin
Postendarterectomy heparin-induced thrombocytopenia. Case report, 632
Herniated nucleus pulposus
Clinical features of the failed-back syndrome, 61
Quantification of thermal asymmetry. Part 2: Application in low-back pain and sciatica, 556
Hibernoma
Epidural hibernoma as a complication of corticosteroid treatment. Case report, 613
Histiocytosis
Leptomeningeal and orbital benign lymphophagocytic histiocytosis. Case report, 610
Hunt and Hess Scale
Current reporting of responsiveness in acute cerebral disorders. A survey of the neurosurgical literature, 692
Hydrocephalus
Changes in periventricular vasculature of rabbit brain following induction of hydrocephalus and after shunting, 115
Function of parietal and frontal shunts in childhood hydrocephalus, 883
Managing proximal shunt obstruction. Letters, 805
Parietal cephalocele: clinical importance of its atretic form and associated malformations, 545
Periventricular vessel changes in hydrocephalus: erratum. Letter, 963
Symptomatic low ICP in shunted hydrocephalus. Letters, 476
Hydroxylapatite
Evaluation in cats of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
Hydroxylapatite: an adjunct to cranial bone grafting, 514
5-Hydroxytryptamine
Potentiating effects of extraluminal oxyhemoglobin to intraluminal 5-hydroxytryptamine in isolated canine internal carotid arteries, 263
Hyperventilation
Pial arteriolar vessel diameter and CO_2 reactivity during prolonged hyperventilation in the rabbit, 923
Hypoalbuminemia
Mechanisms and implications of hypoalbuminemia in head-injured patients, 386

Immunohistochemistry
Detection of mRNA of prolactin and ACTH in clinically nonfunctioning pituitary adenomas, 653
Sequelae of the osmotic blood-brain barrier opening in rats, 421
Immunotherapy
Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
In vitro cytolysis of primitive neuroectodermal tumors of the posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
Isolation and *in vitro* growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes, 745
Penetration of recombinant interleukin-2 across the blood-cerebrospinal fluid barrier, 29
Stereotaxic implantation of dispersed cell suspensions into brain. A systematic appraisal of cell placement and survival, 228
Infection
Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients, 669
A double-blind placebo-controlled trial of perioperative prophylactic antibiotics for elective neurosurgery, 687
Infection-related spontaneous atlantoaxial dislocation in an adult. Case report, 455
Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report, 775
Prophylactic parenteral antibiotics in clean neurosurgical procedures: a review, 52
Results of a randomized trial of vancomycin prophylaxis in craniotomy, 216
Infection, bacterial
Brain abscesses in neonates. A study of 30 cases, 877
Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients, 669
The pathogenesis of spinal epidural abscess: microangiographic studies in an experimental model, 110
Informed consent
Law and medicine: conflict or collaboration? The 1988 Harvey Cushing oration, 319
Instrumentation
Carotid control for intracranial aneurysms. Technical note, 142
Ergonomic considerations in the design of neurosurgery instruments, 436
A new dural elevator for use during removal of the sphenoid wing. Technical note, 793
A serrated suction tip for tumor removal. Technical note, 140
Interferon
Systemic gamma-interferon therapy for recurrent gliomas, 826
Interleukin-1
The acute-phase response of the brain-injured patient, 375
Mechanisms and implications of hypoalbuminemia in head-injured patients, 386
Interleukin-2
Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
In vitro cytolysis of primitive neuroectodermal tumors of the

Index

posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
Isolation and *in vitro* growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes, 745
Penetration of recombinant interleukin-2 across the blood-cerebrospinal fluid barrier, 29
Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma, 751
Internal carotid artery
Carotid control for intracranial aneurysms. Technical note, 142
Potentiating effects of extraluminal oxyhemoglobin to intraluminal 5-hydroxytryptamine in isolated canine internal carotid arteries, 263
Removal of the anterior clinoid process for exposure of the proximal intracranial carotid artery, 529
Rupture of cavernous carotid artery aneurysm causing subdural hematoma and death. Case report, 617
Ventral paraclinoid carotid aneurysms, 340
Internal jugular vein
Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report, 945
Therapeutic embolization of an ascending pharyngeal artery-internal jugular vein fistula. Case report, 132
Interstitial brachytherapy
PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
Intervertebral disc
Anterior cervical disc herniation. Case report, 134
Changes in radicular function following low-back surgery, 649
Clinical features of the failed-back syndrome, 61
Quantification of thermal asymmetry. Part 1: Normal values and reproducibility, 552
Intervertebral space cyst
Intervertebral disc space cyst simulating a recurrent herniated nucleus pulposus. Case report, 137
Intracranial hematoma
The effect of intracerebral hematoma location on the risk of brain-stem compression and on clinical outcome, 518
MR imaging as predictor of delayed posttraumatic cerebral hemorrhage, 203
Resolution of intracranial hematoma. Letters, 149
Intracranial hemorrhage
The pseudodelta sign in acute head trauma, 867
Intracranial pressure
Effect of subarachnoid hemorrhage on intracranial pulse waves in cats, 712
Effects of nifedipine on intracranial pressure in neurosurgical patients with arterial hypertension, 213
High-dose barbiturate control of elevated intracranial pressure in patients with severe head injury, 15
Isovolemic hemodilution in experimental focal cerebral ischemia. Part 1: Effects on hemodynamics, hemorheology, and intracranial pressure, 72
MR imaging of CSF pulsatory flow and its relation to intracranial pressure, 675
Symptomatic low ICP in shunted hydrocephalus. Letters, 476
Intracranial pressure monitoring
Intracranial pressure monitoring after elective intracranial surgery. A retrospective study of 514 consecutive patients, 540
Intramedullary tumor
Cervical spinal intramedullary myxoma in childhood. Case report, 772
Intraoperative monitoring
Changes in CSF pressure after mannitol in patients with and without elevated CSF pressure, 869
Discrepancy between intraoperative SSEP's and postoperative function. Case report, 450
Intravascular occlusion
Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report, 945
Jugular foramen
The widened transcochlear approach to jugular foramen tumors, 887
Juvenile pilocytic astrocytoma
Treatment results of juvenile pilocytic astrocytoma, 171
Lactate
Production and clearance of lactate from brain tissue, cerebrospinal fluid, and serum following experimental brain injury, 736
Lactotroph hyperplasia
Suprasellar craniopharyngioma associated with hyperprolactinemia, pituitary lactotroph hyperplasia, and microprolactinoma. Case report, 620
Laser
Photoradiation therapy and its potential in the management of neurological tumors, 1
Leptomeninges
Castleman's disease of the leptomeninges. Report of three cases, 283
Leptomeningeal and orbital benign lymphophagocytic histiocytosis. Case report, 610
Leptomeningeal spread of intramedullary spinal cord tumors. Report of three cases, 295
Leukotriene
CSF leukotriene C_4 following subarachnoid hemorrhage, 488
Lhermitte-Duclos disease
Recurrent Lhermitte-Duclos disease in a child. Case report, 599
Low-back pain
Quantification of thermal asymmetry. Part 2: Application in low-back pain and sciatica, 556
Lumbar puncture
Deterioration after lumbar puncture below spinal block. Letter, 313
Lumbar spine
Changes in radicular function following low-back surgery, 649
Clinical features of the failed-back syndrome, 61
Intervertebral disc space cyst simulating a recurrent herniated nucleus pulposus. Case report, 137
Lumbar spondylosis
Clinical features of the failed-back syndrome, 61
Lumbosacral spine
Anatomy of lumbosacral spinal nerve roots. Letters, 314
Hemophilic pseudotumor of the spinal canal. Case report, 624
Lymphokine-activated killer cells
Comparison of *in vitro* glioma cell cytotoxicity of LAK cells from glioma patients and healthy subjects, 234
In vitro cytolysis of primitive neuroectodermal tumors of the posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
Isolation and *in vitro* growth of glioma-infiltrating lymphocytes, and an analysis of their surface phenotypes, 745
Stereotaxic implantation of dispersed cell suspensions into brain. A systematic appraisal of cell placement and survival, 228
Lymphoma
Signet-ring cell lymphoma of the central nervous system. Case report, 789
Lymphophagocytosis
Leptomeningeal and orbital benign lymphophagocytic histiocytosis. Case report, 610

Magnetic resonance imaging
Appearance of venous malformations on magnetic resonance imaging, 535
MR imaging and the Chiari II malformation. Letter, 152
MR imaging as predictor of delayed posttraumatic cerebral hemorrhage, 203
MR imaging of CSF pulsatory flow and its relation to intracranial pressure, 675
Relationship of depth of brain lesions to consciousness and outcome after closed head injury, 861
The role of MR imaging in the diagnosis and treatment of anterior sacral meningocele. Report of two cases, 628
The stereotaxic retractor in computer-assisted stereotaxic microsurgery. Technical note, 301
Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
Magnetic resonance spectroscopy
Production and clearance of lactate from brain tissue, cerebrospinal fluid, and serum following experimental brain injury, 736
Malignant fibrous histiocytoma
Intracranial malignant fibrous histiocytoma with abscess-like tumor necrosis. Case report, 780
Mannitol
Changes in CSF pressure after mannitol in patients with and without elevated CSF pressure, 869
Sequelae of the osmotic blood-brain barrier opening in rats, 421
Marfan syndrome
Dural ectasia and the Marfan syndrome, 221
Medical ethics
Law and medicine: conflict or collaboration? The 1988 Harvey Cushing oration, 319
Medical malpractice
Law and medicine: conflict or collaboration? The 1988 Harvey Cushing oration, 319
Medulla oblongata
Schwannoma of the medulla oblongata. Case report, 446
Medulloblastoma
Development of glioblastoma after medulloblastoma. Letters, 642
In vitro cytolysis of primitive neuroectodermal tumors of the posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
Meningioma
Castleman's disease of the leptomeninges. Report of three cases, 283
A light and electron microscopic and immunohistochemical study of human arachnoid villi, 429
Meningiomas and hemorrhagic diathesis, 356
Suprasellar meningiomas: the effect of tumor location on postoperative visual outcome, 523
Tentorial meningiomas: surgical experience with 61 cases and long-term results, 183
Meningitis
Brain abscesses in neonates. A study of 30 cases, 877
Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients, 669
Meningocele
Dural ectasia and the Marfan syndrome, 221
The role of MR imaging in the diagnosis and treatment of anterior sacral meningocele. Report of two cases, 628
Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
Metabolism
The acute-phase response of the brain-injured patient, 375
Reduction of cellular energy requirements. Screening for agents that may protect against CNS ischemia, 568
Metastasis
Intracranial metastasis of prostatic adenocarcinoma. Letters, 644
Microvascular decompression
Hearing loss after microvascular decompression for trigeminal neuralgia, 367
Long-term efficacy of microvascular decompression in trigeminal neuralgia, 35
Microvasculature
Alterations in endothelium-dependent responsiveness of the canine basilar artery after subarachnoid hemorrhage, 239
Changes in periventricular vasculature of rabbit brain following induction of hydrocephalus and after shunting, 115
Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals, 913
The pathogenesis of spinal epidural abscess: microangiographic studies in an experimental model, 110
Microwave radiation
In situ fixation of the spinal cord using microwave radiation, 719
Middle cerebral artery
Effect of opiate antagonists on middle cerebral artery occlusion infarct in the rat, 98
Monoclonal antibody
Cell kinetics studies of human brain tumors by *in vitro* labeling using anti-BUdR monoclonal antibody, 371
Mycotic vasculitis
Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report, 775
Myelography
Acute postmyelographic neurological deterioration. Letters, 148
Myelomeningocele
Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
Myelopathy
Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report, 940
Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases, 934
Myxoma
Cervical spinal intramedullary myxoma in childhood. Case report, 772

NADPH-diaphorase
Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex, 904
Naloxone
Effect of opiate antagonists on middle cerebral artery occlusion infarct in the rat, 98
Neonate
Brain abscesses in neonates. A study of 30 cases, 877
Nerve injury
Quantification of thermal asymmetry. Part 1: Normal values and reproducibility, 552
Nerve root
Changes in radicular function following low-back surgery, 649
Neurinoma
Schwannoma of the medulla oblongata. Case report, 446
Neurological deterioration
Acute postmyelographic neurological deterioration. Letters, 148
Deterioration after lumbar puncture below spinal block. Letter, 313

Index

Neuropeptide Y
Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals, 913
Neurosurgical education
Foundation for International Education in Neurological Surgery, Inc. Report of activities, 1986–1988. Letter, 800
Utilization of resources for the maintenance of excellence in neurological surgery. The 1988 AANS presidential address, 815
Nifedipine
Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
Effects of nifedipine on intracranial pressure in neurosurgical patients with arterial hypertension, 213
Nimodipine
Control of epilepsy partialis continuans with intravenous nimodipine. Report of two cases, 949
Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery, 683
Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
Effects of nimodipine on the production of thromboxane A_2 following total global cerebral ischemia, 416
The influence of nimodipine on cerebral blood flow autoregulation and blood-brain barrier, 919
Nimodipine therapy in poor-grade aneurysm patients. Letters, 477
Nimodipine treatment in poor-grade aneurysm patients. Letters, 803
Nitroprusside
Alterations in endothelium-dependent responsiveness of the canine basilar artery after subarachnoid hemorrhage, 239
Nutrition
The acute-phase response of the brain-injured patient, 375

Obituary
Edwin Barkley Boldrey, M.D., 1906–1988, 813
Occult arteriovenous malformation
Angiographically occult arteriovenous malformations, 350
Angiographically occult intracranial vascular malformations. Letters, 642, 960
Oculogyric crisis
Positional oculogyric crises. Case report, 951
Opiate antagonist
Effect of opiate antagonists on middle cerebral artery occlusion infarct in the rat, 98
Optic nerve
Cavernous hemangioma of the optic nerve. Case report, 292
Orbit
Leptomeningeal and orbital benign lymphophagocytic histiocytosis. Case report, 610
Osteogenesis
Evaluation in cats of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
Outcome, *see also* Prognosis
Changes in radicular function following low-back surgery, 649
Late neurological changes following traumatic spinal cord injury, 399
Management of elderly patients with aneurysmal subarachnoid hemorrhage, 332
Outcome after SAH: correction. Letters, 645
Suprasellar meningiomas: the effect of tumor location on postoperative visual outcome, 523
Trigeminal schwannoma. Surgical series of 14 cases with review of the literature, 850
Oxyhemoglobin
Experimental vasospasm in cultured arterial smooth-muscle cells. Part 1: Contractile and ultrastructural changes caused by oxyhemoglobin, 92
Potentiating effects of extraluminal oxyhemoglobin to intraluminal 5-hydroxytryptamine in isolated canine internal carotid arteries, 263

Pain
Clinical features of the failed-back syndrome, 61
Papilloma
Choroid plexus papillomas: long-term follow-up results in a surgically treated series, 843
Parkinson's disease
Adrenal medullary tissue grafting in Parkinson's disease. Letter, 151
Neural transplantation for Parkinson's disease. Letters, 807
Peripheral nervous system
The extracellular matrix of the central and peripheral nervous systems: structure and function, 155
Peritoneal membrane
Study and clinical application of a porcine biomembrane for the repair of dural defects, 707
Photoradiation therapy
Bromodeoxyuridine: a comparison of its photosensitizing and radiosensitizing properties, 410
Photoradiation therapy and its potential in the management of neurological tumors, 1
Pia-arachnoid
The fine anatomy of the human spinal meninges. A light and scanning electron microscopy study, 276
Pineal gland
Pineoblastoma with an unusually long survival. Case report, 287
Piperacillin
A double-blind placebo-controlled trial of perioperative prophylactic antibiotics for elective neurosurgery, 687
Pituitary adenoma
Detection of mRNA of prolactin and ACTH in clinically nonfunctioning pituitary adenomas, 653
Suprasellar craniopharyngioma associated with hyperprolactinemia, pituitary lactotroph hyperplasia, and microprolactinoma. Case report, 620
Plasma-cell granuloma
Primary intracranial plasma-cell granuloma. Case report, 785
Plasminogen activator
Meningiomas and hemorrhagic diathesis, 356
Positron emission tomography
PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
Posterior fossa tumor
A comparative study of brain-stem auditory evoked potentials and blink reflexes in posterior fossa tumor patients, 660
Primitive neuroectodermal tumor
In vitro cytolysis of primitive neuroectodermal tumors of the posterior fossa (medulloblastoma) by lymphokine-activated killer cells, 403
Prognosis
Enhanced specificity of prognosis in severe head injury, 381
Prognostic implications of the proliferative potential of low-grade astrocytomas, 839

Prolactin
Detection of mRNA of prolactin and ACTH in clinically nonfunctioning pituitary adenomas, 653
Prolactin-secreting adenoma
Suprasellar craniopharyngioma associated with hyperprolactinemia, pituitary lactotroph hyperplasia, and microprolactinoma. Case report, 620
Proptosis
Bilateral proptosis from a subgaleal hematoma. Case report, 770
Prostatic adenocarcinoma
Intracranial metastasis of prostatic adenocarcinoma. Letters, 644
Proteus mirabilis
Brain abscesses in neonates. A study of 30 cases, 877
Pseudodelta sign
The pseudodelta sign in acute head trauma, 867

Quadrigeminal cistern
Heterotransplantation of malignant human gliomas in neonatal rats, 928
Quality control
Utilization of resources for the maintenance of excellence in neurological surgery. The 1988 AANS presidential address, 815

Radiation therapy
Bromodeoxyuridine: a comparison of its photosensitizing and radiosensitizing properties, 410
Choroid plexus papillomas: long-term follow-up results in a surgically treated series, 843
Intra-arterial bromodeoxyuridine radiosensitization and radiation in treatment of malignant astrocytomas, 500
PET of malignant cerebral tumors after interstitial brachytherapy. Demonstration of metabolic activity and correlation with clinical outcome, 830
Primary intracranial plasma-cell granuloma. Case report, 785
Treatment results of juvenile pilocytic astrocytoma, 171
Radicular deficit
Changes in radicular function following low-back surgery, 649
Radicular syndrome
Intervertebral disc space cyst simulating a recurrent herniated nucleus pulposus. Case report, 137
Reaction Level Scale
A comparison of the Glasgow Coma Scale and the Reaction Level Scale (RLS85), 699
Regional anesthesia
Low morbidity and mortality of carotid endartectomy performed with regional anesthesia, 483
Retrolabyrinthine transsigmoid approach
Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
Revascularization
Superficial temporal-middle cerebral artery bypass: clinical pre- and postoperative angiographic correlation, 46
Rheumatoid arthritis
Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895

Saccular aneurysm
Diagnosis and treatment of vertebral aneurysms, 345
Sacro-spinal meningocele
Dural ectasia and the Marfan syndrome, 221
Sacrum
The role of MR imaging in the diagnosis and treatment of anterior sacral meningocele. Report of two cases, 628
Scalp defect
Parietal cephalocele: clinical importance of its atretic form and associated malformations, 545
Scanning electron microscopy
The fine anatomy of the human spinal meninges. A light and scanning electron microscopy study, 276
Schwannoma
Schwannoma of the medulla oblongata. Case report, 446
Sciatica
Quantification of thermal asymmetry. Part 2: Application in low-back pain and sciatica, 556
Sella turcica
Intrasellar cysticercosis, 58
Septicemia
Brain abscesses in neonates. A study of 30 cases, 877
Serotonin
Subarachnoid hemorrhage inhibition of endothelium-derived relaxing factor in rabbit basilar artery, 247
Shunt
Cerebrospinal fluid diversion in the treatment of benign intracranial hypertension, 195
Function of parietal and frontal shunts in childhood hydrocephalus, 883
Managing proximal shunt obstruction. Letters, 805
Symptomatic low ICP in shunted hydrocephalus. Letters, 476
Signet-ring cell lymphoma
Signet-ring cell lymphoma of the central nervous system. Case report, 789
Skull
Evaluation in cat of a new material for cranioplasty: a composite of plaster of Paris and hydroxylapatite, 269
Hydroxylapatite: an adjunct to cranial bone grafting, 514
Madreporic coral: a new bone graft substitute for cranial surgery, 510
Management of extensive and difficult cranial defects, 210
Skull base tumor
The widened transcochlear approach to jugular foramen tumors, 887
Smooth-muscle cell
Experimental vasospasm in cultured arterial smooth-muscle cells. Part 1: Contractile and ultrastructural changes caused by oxyhemoglobin, 92
Spinal block
Deterioration after lumbar puncture below spinal block. Letter, 313
Spinal canal
Hemophilic pseudotumor of the spinal canal. Case report, 624
Spinal cavernous angioma
Treatment of spinal cavernous angiomas. Letters, 476
Spinal cord
Anatomy of lumbosacral spinal nerve roots. Letters, 314
In situ fixation of the spinal cord using microwave radiation, 719
Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report, 940
Myelopathy due to intracranial dural arteriovenous fistulas draining intrathecally into spinal medullary veins. Report of three cases, 934
Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
Treatment of spinal cavernous angiomas. Letters, 476
Spinal cord injury
Effects of treatment with U-74006F on neurological outcome following experimental spinal cord injury, 562

Index

Late neurological changes following traumatic spinal cord injury, 399
Recurrent spinal cord injury without radiographic abnormalities in children, 177
Spinal cord neoplasm
Cervical spinal intramedullary myxoma in childhood. Case report, 772
Discrepancy between intraoperative SSEP's and postoperative function. Case report, 450
Leptomeningeal spread of intramedullary spinal cord tumors. Report of three cases, 295
Spinal epidural abscess
The pathogenesis of spinal epidural abscess: microangiographic studies in an experimental model, 110
Spinal meninges
The fine anatomy of the human spinal meninges. A light and scanning electron microscopy study, 276
Spine stabilization
Infection-related spontaneous atlantoaxial dislocation in an adult. Case report, 455
Spongiform encephalopathy
Creutzfeldt-Jakob disease probably acquired from a cadaveric dura mater graft. Case report, 766
S-100 protein
Leptomeningeal and orbital benign lymphophagocytic histiocytosis. Case report, 610
Staphylococcus aureus
The pathogenesis of spinal epidural abscess: microangiographic studies in an experimental model, 110
Stereotaxis
CT-guided stereotaxic aspiration of colloid cysts. Letters, 150
Limiting artifact in CT stereotaxic periventricular procedures. Technical note, 459
Positional oculogyric crises. Case report, 951
Stereotaxic implantation of dispersed cell suspensions into brain. A systematic appraisal of cell placement and survival, 228
The stereotaxic retractor in computer-assisted stereotaxic microsurgery. Technical note, 301
Stereotaxic surgery in the treatment of multiple brain abscesses, 188
Streptococcus viridans
Mycotic vasculitis with repeated intracranial aneurysmal hemorrhage. Case report, 775
Subarachnoid hemorrhage
Bilirubin and the induction of intracranial arterial spasm, 593
CSF leukotriene C_4 following subarachnoid hemorrhage, 488
Diagnosis and treatment of vertebral aneurysms, 345
Early versus late intracranial aneurysm surgery in subarachnoid hemorrhage, 326
Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH, 723
Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery, 683
Effect of subarachnoid hemorrhage on intracranial pulse waves in cats, 712
Management of elderly patients with aneurysmal subarachnoid hemorrhage, 332
Outcome after SAH: correction. Letters, 645
Possible role of complement peptides in SAH. Letters, 802
Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
Subarachnoid hemorrhage inhibition of endothelium-derived relaxing factor in rabbit basilar artery, 247
Symptomatic arterial luminal narrowing presenting months after subarachnoid hemorrhage and aneurysm clipping, 494
Ventral paraclinoid carotid aneurysms, 340
Subdural hematoma
Rupture of cavernous carotid artery aneurysm causing subdural hematoma and death. Case report, 617
Subgaleal hematoma
Bilateral proptosis from a subgaleal hematoma. Case report, 770
Substance P
Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals, 913
Suction device
A serrated suction tip for tumor removal. Technical note, 140
Superficial temporal-middle cerebral artery bypass
Superficial temporal-middle cerebral artery bypass: clinical pre- and postoperative angiographic correlation, 46
Suprasellar neoplasm
Suprasellar meningiomas: the effect of tumor location on postoperative visual outcome, 523
Surgical approach
Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
Tentorial meningiomas: surgical experience with 61 cases and long-term results, 183
Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
The widened transcochlear approach to jugular foramen tumors, 887
Temporary clamp
Carotid control for intracranial aneurysms. Technical note, 142
Tension pneumocephalus
Postoperative tension pneumocephalus. Letters, 641
Tentorial herniation
The effect of intracerebral hematoma location on the risk of brain-stem compression and on clinical outcome, 518
Tentorial neoplasm
Tentorial meningiomas: surgical experience with 61 cases and long-term results, 183
Tethered cord
Tethered cord syndrome of delayed onset following repair of myelomeningocele, 393
Thermography
Quantification of thermal asymmetry. Part 1: Normal values and reproducibility, 552
Quantification of thermal asymmetry. Part 2: Application in low-back pain and sciatica, 556
Thrombin
Pharmacological comparison of endothelium-dependent relaxation in isolated cerebral and extracerebral arteries, 580
Thrombocytopenia
Postendarterectomy heparin-induced thrombocytopenia. Case report, 632
Thrombolytic therapy
Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH, 723
Thromboxane
Effects of nimodipine on the production of thromboxane A_2 following total global cerebral ischemia, 416
Thyrotropin-releasing hormone
Effect of opiate antagonists on middle cerebral artery occlusion infarct in the rat, 98
Tissue fixation
In situ fixation of the spinal cord using microwave radiation, 719
Tissue-type plasminogen activator
Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH, 723

T lymphocyte
Specific cytotoxic activity of T lymphocyte clones derived from a patient with gliosarcoma, 751
Transcochlear approach
The widened transcochlear approach to jugular foramen tumors, 887
Transoral-transpharyngeal approach
Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients, 895
Transplantation
Adrenal medullary tissue grafting in Parkinson's disease. Letter, 151
Brain xenografts: the effect of cyclosporin A on graft survival, 121
Neural transplantation for Parkinson's disease. Letters, 807
Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex, 904
Trigeminal nerve
Experimental retrograde adriamycin trigeminal sensory ganglionectomy, 760
Glycerol rhizolysis for treatment of trigeminal neuralgia, 39
Hearing loss after microvascular decompression for trigeminal neuralgia, 367
Percutaneous retrogasserian glycerol rhizolysis in the management of trigeminal neuralgia, 361
Trigeminal nerve schwannoma
Trigeminal schwannoma. Surgical series of 14 cases with review of the literature, 850
Trigeminal neuralgia
Glycerol rhizolysis for treatment of trigeminal neuralgia, 39
Hearing loss after microvascular decompression for trigeminal neuralgia, 367
Long-term efficacy of microvascular decompression in trigeminal neuralgia, 35
Percutaneous retrogasserian glycerol rhizolysis in the management of trigeminal neuralgia, 361
Tuberculum sellae
Suprasellar meningiomas: the effect of tumor location on postoperative visual outcome, 523
Tumor angiogenesis factor
Further characterization of malignant glioma-derived vascular permeability factor, 254
Tumor transplantation
Heterotransplantation of malignant human gliomas in neonatal rats, 928

U-74006F
Effects of treatment with U-74006F on neurological outcome following experimental spinal cord injury, 562

Vancomycin
Prophylactic parenteral antibiotics in clean neurosurgical procedures: a review, 52
Results of a randomized trial of vancomycin prophylaxis in craniotomy, 216
Varicose veins
Myelopathy due to epidural varicose veins of the cervicothoracic junction. Case report, 940
Vascular permeability
Further characterization of malignant glioma-derived vascular permeability factor, 254
Vasospasm
Alterations in endothelium-dependent responsiveness of the canine basilar artery after subarachnoid hemorrhage, 239
Bilirubin and the induction of intracranial arterial spasm, 593
CSF leukotriene C_4 following subarachnoid hemorrhage, 488
Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH, 723
Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery, 683
Effect of subarachnoid hemorrhage on intracranial pulse waves in cats, 712
Experimental vasospasm in cultured arterial smooth-muscle cells. Part 1: Contractile and ultrastructural changes caused by oxyhemoglobin, 92
Potentiating effects of extraluminal oxyhemoglobin to intraluminal 5-hydroxytryptamine in isolated canine internal carotid arteries, 263
Subarachnoid hemorrhage inhibition of endothelium-derived relaxing factor in rabbit basilar artery, 247
Symptomatic arterial luminal narrowing presenting months after subarachnoid hemorrhage and aneurysm clipping, 494
Venous malformation
Appearance of venous malformations on magnetic resonance imaging, 535
Ventriculoperitoneal shunt
Function of parietal and frontal shunts in childhood hydrocephalus, 883
Verapamil
Effects of calcium antagonists on intracerebral penetrating arterioles in rats, 104
Vertebral artery
Decompression of the vertebral artery for bow-hunter's stroke. Case report, 127
Diagnosis and treatment of vertebral aneurysms, 345
Fatal intracranial hemorrhage after balloon occlusion of an extracranial vertebral arteriovenous fistula. Case report, 945
Retrolabyrinthine transsigmoid approach to basilar trunk and vertebrobasilar artery junction aneurysms. Technical note, 461
Vertebrobasilar insufficiency
Decompression of the vertebral artery for bow-hunter's stroke. Case report, 127

Xenograft
Brain xenografts: the effect of cyclosporin A on graft survival, 121
Xenon-133
Cerebrovascular CO_2 reactivity after carotid artery occlusion, 24